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South Carolina Department of Health and Environmental Control

National Pollutant Discharge Elimination System Permit
For Discharge to Surface Waters

This permit certifies that

Town of Arcadia Lakes, City of Forest Acres and Richland County

have been granted permission to discharge storm water from the municipal separate storm sewer systems located in

Richland County, South Carolina

to all receiving waters in the State of South Carolina

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, III, IV and V hereof. This permit is issued in accordance with the provisions of the Pollution Control Act of South Carolina (S.C. Code Sections 48-1-10 *et seq*., 1976), Regulation 61-9 and with the provisions of the Federal Clean Water Act (PL 92-500), as amended, 33 U.S.C. 1251 *et seq*., the "Act."

DRAFT Permit for Public Notice

Ann R. Clark, Director
Storm Water, Construction and Agricultural Permitting Division
Bureau of Water

Issued: **P/N 15-940-R** **Expires: December 31, 2021**

Effective: **January 1, 2016** **Permit No.: SCS400001**

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NPDES DRAFT PERMIT N°: SCS400001
RICHLAND COUNTY, SOUTH CAROLINA
MEDIUM MUNICIPAL SEPARATE STORM SEWER SYSTEM

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MEDIUM MUNICIPAL SEPARATE STORM SEWER SYSTEM

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PART I.
DISCHARGES AUTHORIZED UNDER THIS PERMIT

A. **Permit Area.** This permit covers all areas located within the political boundary of Richland County served by Municipal Separate Storm Sewer Systems (MS4) and by Small Municipal Separate Storm Sewer Systems (small MS4) owned or operated by the permittees identified in Part I.C.

B. **Authorized Discharges.** Except for discharges prohibited under Part I.D., this permit authorizes all existing or new discharges composed entirely of storm water from the MS4 and the small MS4 identified in Part I.C to waters of the State of South Carolina from those portions of the MS4 and small MS4 owned or operated by the permittees. Discharge of pollutants shall be reduced to the Maximum Extent Practicable (MEP), shall not cause, nor contribute to, violations of South Carolina Water Quality Standards, and shall be in compliance with effluent limits consistent with the assumptions and requirements of any available wasteload allocation (WLA) for these discharges pursuant to 40 CFR 130.7, or with equivalent analysis, that determines such limitations are needed to protect water quality.

C. **Permittees.** The following entities are permittees subject to the conditions of this permit:

- **Town of Arcadia Lakes**
- **City of Forest Acres**
- **Richland County**

References to "Permittees" in this permit include each of the entities above except as otherwise indicated. All permittees shall enact and enforce regulatory mechanisms to effectively regulate the discharge of pollutants to the portions of the MS4s that they own or operate.

1. Each permittee is individually responsible for:

   a. Compliance with permit conditions relating to discharges from portions of the MS4 where the permittee is the operator;
   b. Storm water management program (SWMP) implementation on portions of the MS4 where the permittee is either the owner, the operator, or the responsible party;
   c. Permit conditions are established for specific portions of the MS4, a permittee needs only comply with the permit conditions relating to those portions of the MS4 for which the permittee is either the owner, the operator, or the responsible party;
   d. A plan of action to assume responsibility for implementing storm water management and monitoring programs on their portions of the MS4s (see section II.H.3, below);
   e. Any violation of specific standards for ground water quality as outlined in SC regulation 61-68 resulting from runoff discharged into the subsurface via storm water controls or storage / detention. For areas within the boundaries of the MS4 where it is determined by SC DHEC, that there is a potential ground water contamination caused by storm water from the MS4, the permittee will, after proper notification by SC DHEC, develop and upon approval, implement a ground water monitoring plan to monitor compliance with specific standards

for ground water. If an impact to groundwater for which a permittee is responsible is confirmed by monitoring results, a permittee, after notification from SC DHEC, will develop a proposal to determine the source and extent of the impact to Soil/Groundwater; and upon approval, implement the assessment. Further, the permittee will, upon notification from SC DHEC, develop, and upon approval, implement a corrective action plan to remediate groundwater, soil and/or other media impacted as determined by the monitoring assessment.

2. For all areas of the MS4 owned or operated by the permittees, they are responsible for:

   a. Submission of annual reporting requirements as specified in Part VI.A (*ANNUAL REPORT*);
   b. Collection of monitoring data as required by Part V;
   c. Ensuring implementation of system-wide management program elements, including any system-wide public education efforts.

3. For all areas of the MS4 owned or operated by the permittees, they are responsible for permit compliance on portions of the MS4:

   a. Where operational or SWMP implementation authority over portions of the MS4 exist; or,
   b. Where both the owner and the operator are jointly responsible for permit compliance on those portions of the MS4.

D. **Limitations on Coverage.** Section 402(p)(3)(B)(ii) of the Clean Water Act specifically requires the South Carolina Department of Health and Environmental Control (SCDHEC or the Department) to include within this permit an effective prohibition on non-storm water entering the MS4s. The following discharges are not authorized by this permit:

1. ***Non-storm Water****:* discharges of non-storm water, except where such discharges are:
   a. In compliance with a separate NPDES permit; or,
   b. Identified by and in compliance with Part II.B.7.b of this permit.

2. ***Spills*****:** discharges of material resulting from a spill, except where such discharges are:

   a. The result of an Act of God where reasonable and prudent measures have been taken to minimize the impact of the discharge; or,
   b. An emergency discharge required to prevent imminent threat to human health or prevent severe property damage, provided reasonable and prudent measures have been taken to minimize the impact of the discharge.

PART II
STORM WATER MANAGEMENT PROGRAM

A. Introduction.

Permittees authorized herein shall continue the implementation of a comprehensive storm water management program (SWMP), in compliance with NPDES Phase I and Phase II stormwater requirements, including pollution prevention measures, treatment or removal techniques, storm water monitoring, use of legal authority, and other appropriate means to control the quality of storm water discharged from the MS4.

1. The SWMP shall continue to be implemented in accordance with:

   a. Section 402(p)(3)(B) of the Clean Water Act,
   b. South Carolina (SC) Water Pollution Control Permits Regulation 61-9,
   c. SC Water Classifications and Standards (SC Regulation 61-68),
   d. SC Classified Waters (SC Regulation 61-69) Sections 48-1-10, et seq of the 1976 Code, and,
   e. Stormwater Management and Sediment Reduction Act (SC Regulation 72-300) Chapter 14, Title 48, 1976 SC Code, as amended, or similarly applicable statute or County ordinance.

Controls and activities in the SWMP shall clearly define areas of permittee jurisdiction, applicability, and responsibility on specific area basis. The SWMP shall continue to provide the necessary controls and implementation schedules to effectively prohibit the discharge of non-storm water into the MS4 and to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The SWMP shall be consistent with the SC Watershed Water Quality Management Strategy (see definition in Part VIII). Compliance with the SWMP requirements of this permit shall be stated yearly in the *ANNUAL REPORT* required in Part VI.

MEP will continue to be determined through a series of steps associated with identification and implementation of the SWMP elements. SC DHEC Bureau of Water establishes requirements for each of the SWMP elements for permittees to identify the Best Management Practices (BMP) to be performed and the measurable goals to be achieved. Permittees are herein required to identify the BMP and the associated measurable goals for addressing each of the elements in their SWMP

2. Implementation of BMP consistent with the SWMP pursuant to applicable provisions of SC Water Pollution Control Permits Regulation 61-9 122.26(d) or 122.34 required as a condition of this NPDES MS4 permit directs permittees to:

   a. Develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from your MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act;

   b. Include elements required under SC Water Pollution Control Permits Regulation 61-9 122.26(d) & 122.34; and,

c. Implement the controls to reduce the discharge of pollutants, including management practices, control techniques, and system, design and engineering methods and such other provisions as SC DHEC Bureau of Water determines appropriate for the control of such pollutants in order to constitute compliance with the standard of "reducing pollutants to the maximum extent practicable."

Permittees will determine the specific details in each of the SWMP elements that represent MEP through an evaluative process. In this process, SC DHEC Bureau of Water and the permittees evaluate the proposed SWMP controls to determine whether reduction of pollutants to the MEP could be achieved with the identified BMP. SC DHEC Bureau of Water envisions that this evaluative process will consider such factors as conditions of receiving waters, specific local concerns, and other aspects included in the comprehensive watershed plan.

3. SWMP performance will be evaluated against a MEP criteria including, but not limited to:

a. Effectiveness to address the pollutant(s) of concern,
b. Public acceptance,
c. Cost,
d. Technical feasibility, and
e. Compliance with Federal, State, local laws and all applicable regulations.

For purposes of this permit, narrative effluent limitations requiring implementation of BMP are generally the most appropriate form of effluent limitations when designed to satisfy technology requirements (including reductions of pollutants to the MEP) and to protect water quality. Special provisions shall be included in the SWMP to address highly sensitive waters, areas in proximity to drinking water intakes, watersheds for which a TMDL has been approved, areas of development and significant redevelopment where Antidegradation for Activities Contributing Nonpoint Source Pollution to Impaired Waters applies and any watershed draining to an impaired waterbody. SC DHEC Bureau of Water will specify a period of up to 5 years from the effective date of this permit for permittees to implement the SWMP in accordance to this permit. Additional elaboration of the MEP determination process is not necessary because MEP is determined on a permit-by-permit basis.

B. **SWMP Requirements.**

1. ***Structural Controls and Storm Water Collection System Operation***

a. Permittees listed in Part I.C are responsible for:

i. Maintaining an internal record keeping system to track inspections and maintenance activities performed during the permit term,

ii. Providing for maintenance logs and identify specific maintenance activities for each class of control,

iii. Demonstrating how pollutants from private conveyances (including floatables) will be controlled.

iv. Implementing and modifying, when applicable, guidance on BMP's to ensure the effectiveness of the SWMP with respect to structural and non-structural controls; and,

v. Providing an annual training and education program for appropriate employees involved in stormwater inspection, maintenance, pollution prevention and good housekeeping practices.

b. Richland County shall continue to maintain and continue to develop an inventory of all structural control BMP. The inventory shall include tracking of all inspections and maintenance activities performed. As new BMP are added through new development, retrofit, etc, these BMP additions must be reflected in the inventory no later than the following *ANNUAL REPORT*.

c. Storm Sewer System Maintenance Activities - MS4 Maintenance

Pollution prevention/good housekeeping for municipal operations. Permittees must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. This program must include employee training to prevent and reduce storm water pollution from all municipal activities including storm water system maintenance.

i. *Assessment/prioritization of MS4 Maintenance* – Twelve (12) months from the effective date of this permit, permittees must prioritize their owned and / or operated storm water management systems / structures. A schedule must be implemented with maintenance activities to begin no later than 24 months from the effective date of the permit.

ii. *Pollution prevention from municipal O&M activities and operations* – Eighteen (18) months from the effective date of this permit, permittees must develop a set of pollution prevention measures that, when applied during municipal O&M activities, will reduce the discharge of pollutants in stormwater. Municipal operation and maintenance activities to be considered include but are not limited to pavement and rights-of-way maintenance, bridge maintenance, cold weather operations, and municipally sponsored events.

iii. *Maintenance of municipally-owned, operated and/or maintained structural stormwater controls* –Permittees must inspect, and maintain, wherever and whenever necessary, municipally-owned, operated and / or maintained structural stormwater controls. Permittees must also maintain municipally owned, operated or maintained green infrastructure practices through regularly maintenance activities prioritized and scheduled as required above.

iv. *Employee Training and Education Requirements* –Permittees must develop an annual employee training program for employees involved in implementing pollution prevention and good housekeeping practices as specified below.

(a) Annual training must include a general stormwater education component, any new technologies, operations, or responsibilities that arise during the year, and the permit requirements applicable to the staff being trained.

(b) Description of the program must be maintained for review by SC DHEC Bureau of Water.

(c) Permittees must also identify and track all personnel requiring training and records must be maintained.

(d) Training must begin within the first year from the effective date of permit authorization.

(e) Employee Training and Education Requirements contained in this part are also required under part II.B.5.a.iv

v. *Requirements for Contractors Oversight* –

(a) Contractors hired by permittees to perform municipal maintenance activities must be contractually required to comply with all of the MS4 stormwater control measures, good housekeeping practices, and facility-specific stormwater management procedures.

(b) Permittees must provide oversight of contractor activities to ensure that contractors are using appropriate control measures and procedures.

(c) These requirements for contractor oversight are also applicable under the Pesticides, Herbicides and Fertilizers (PHF) element (section II.B.6.d below).

d. Each *ANNUAL REPORT* shall,

i. Report on complete drainage system inventory updates, including:

(a) Inspection activities and schedules
(b) Maintenance activities and schedules
(c) Storm sewer system and storm water control structures database with their inspection frequency schedule, QA/QC and any field studies conducted for data accuracy during the reported year.

ii. Document the use of the stormwater inventory as a tool in proactive maintenance,

iii. Report on the maintenance inspection conducted for all items inventoried the previous

year and prepare a maintenance inspection schedule for the next year, report the maintenance activities undertaken as a tool in proactive maintenance and document all these maintenance activities. This summary must include the facilities inspected, the findings, and the maintenance activities undertaken to maintain the proper operation of the structural controls and storm water collection systems. Note specific maintenance practices and activities that are to be used to maintain optimum performance,

iv. Maintain the storm sewer system outfalls database, including structures for storm water quality and quantity control,

v. Have identified the location of existing major storm water structural controls; assessed the need for additional ones, submitted the maintenance log along with the maintenance report, and evaluated the results,

vi. If these activities, including the installation of necessary structural control devices are performed by others under a contractual agreement, then Richland County shall retain copies of the contractual agreement which specifies the maintenance activities to be performed and the schedule of frequency,

vii. Extensive inspection documentation and maintenance records shall be retained by the permittees in accordance with subpart VI.D of this permit. Annual evaluations shall be made to assess the accomplishments of the inspection and maintenance program in maintaining the proper operation of the structural controls. Pollutant reduction loads are expected. Should modification of the inspection, or maintenance activities, of the permittees be warranted to meet MEP, any modifications summarized in the annual evaluation shall be included within the information of the *ANNUAL REPORT* required under subpart VI.A of this permit.

2. ***Areas of New Development and Redevelopment****:*

No later than 24 months from the effective date of this permit, Permittees must implement planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from the MS4 that receive discharges from areas of new development and significant redevelopment after construction is completed.

The comprehensive planning process involves public participation and, where necessary, intergovernmental coordination to reduce the discharge of pollutants to the MEP using management practices, control techniques and system, design and engineering methods and such other provisions that are appropriate.

a. Existing regulatory mechanisms shall continue to be implemented, revised and /or modified as necessary to ensure that the discharge of pollutants in storm water runoff resulting from areas of new development and redevelopment is reduced to pre-development levels to the MEP and to protect water quality.

b. MS4 shall establish all requirements necessary to ensure that improvement, or at least, maintenance of the existing quality of water bodies or watersheds will be attained through the use of post-construction storm water management controls to the MEP. This comprehensive master planning (as defined in SC R. 61-9 122.26(d)(2)(iv)(A)(2)) shall be consistent with:

   i. SC Water Pollution Control Permits Regulation 61-9 122.26(d)(1)(v)(A), 122.26(d)(2)(iv)(D), 122.26(d)(2)(v), 122.26(d)(2)(vii), 122.34(a), 122.34(b)(4 & 5) & 122.34(e & f);

   ii. SC Water Classifications and Standards (SC Regulation 61-68), and SC Classified Waters (SC Regulation 61-69) Sections 48-1-10, et seq of the 1976 Code

   iii. Storm Water Management and Sediment Reduction Act (SC Regulation 72-305) Chapter 14, Title 48, 1976 SC Code as amended or similarly applicable statute or county ordinance;

   iv. The "effective prohibition" and "MEP" standards from Section 402(p)(3)(B) of the Clean Water Act.

c. The comprehensive master planning process shall include water quality standards for developers, design engineers and permittees. By the *first ANNUAL REPORT* permittees shall clearly identify, at a minimum, the following seven components:

   i. Management objectives for streams, wetlands and other State waters;

   ii. Design criteria and site performance standards for storm water controls for new developments and redevelopments. Encourage green infrastructure and low impact development. Sensitive areas where urban development or redevelopment is likely to occur and areas that are sensitive to the effects of urbanization shall be given utmost consideration. State waters, topography, soil types, ground water uses (provide notification to SCDHEC of basin location in the Well Head Protection Area (WHPA)), potential impacts of the aforementioned, and other relevant factors must be addressed;

   iii. New development or redevelopment standards to be used can be either one, combination, or equivalent combination of design strategies, control measures, practices or provisions. These may include practices such as infiltration, evapotranspiration, rain harvesting and stormwater reuse and recharge that demonstrate the runoff reduction and pollution removal necessary to maintain pre-development levels to the MEP and to protect water quality. The first inch of runoff must be managed (part II.B.2.j.i, below);

   iv. Measures to minimize the effects of new development on storm water quality included in local code and ordinance requirements such as retention of forested riparian buffers in newly developed areas and restoration of forested riparian buffers on sites where they have been removed, development and inclusion of green infrastructure and low impact development practices MS4-wide must be promoted;

v. The site development review process for the evaluation and approval of storm water drainage or storm water management programs. Requirements in drainage or storm water management programs can be coordinated with review of other related plans such as those for site grading or landscaping. Establish post-construction BMP requirements bearing in mind the hydrologic nature of the county's watersheds. Personnel reviewing proposed construction shall be familiar with the latest site planning techniques with regard to storm water management during and after construction. Such planning shall address controls to reduce pollutants in discharges to MS4 from areas of new development and redevelopment after construction activity is completed and shall ensure the maintenance of such controls in perpetuity. Procedures for verification, inspection, tracking and enforcement required in part II.B.2.j.iii – v must be in place by the *first ANNUAL REPORT*,

vi. Measures to specifically protect all highly sensitive waters located in their MS4. Development of these measures shall effectively protect outstanding national resource waters (ONRW), outstanding resource waters (ORW), and Trout Put Grow and Take waters (TPGT) as listed in South Carolina Water Classifications & Standards and Classified Waters (SC R.61-68 and 61-69 respectively). In addition, source water protection areas shall be effectively protected from industrial and municipal storm water discharges. Protection shall be extended during and after construction.

vii. Measures to address the following:

(a) Highly sensitive waters,
(b) Areas in proximity to drinking water intakes,
(c) Watersheds for which a TMDL has been approved,
(d) Areas of development and significant redevelopment where Antidegradation for Activities Contributing Nonpoint Source Pollution to Impaired Waters applies, and,
(e) Watersheds draining to an impaired waterbody.

d. For areas of new development, there shall be no increase in the discharge of pollutants with respect to pre-development levels to the "effective prohibition" and "MEP" standards from Section 402(p)(3)(B) of the Clean Water Act;

i. Impervious surfaces shall be minimized;

ii. BMP with the best pollutant removal performance shall be selected for post construction storm water management;

iii. Forested stream buffers and wetlands shall be protected; and,

iv. Drainage "hot spots" shall be effectively addressed.

v. Requirements in sections II.B.2.d.i-iv shall be reported yearly starting on the *second ANNUAL REPORT*.

e. For areas of significant redevelopment, incentives for water quality improvements shall be developed prior to the SECOND ANNUAL REPORT and provided to the MEP when upgrading components of the MS4 or, when replacing deteriorating components of the MS4, to meet water quality design criteria;

   i. Forested riparian buffers will be restored;

   ii. Water quality design criteria shall be enforced to the MEP;

   iii. Discharge of pollutants in storm water runoff from redeveloped areas shall be effectively eliminated, or at least substantially reduced, through the design, installation, implementation and perennial maintenance of stormwater control measures that approximate pre-development pollutant levels to the "MEP" standards from Section 402(p)(3)(B) of the Clean Water Act and protect water quality standards; and,

   iv. Implementation of redevelopment water quality requirements, including incentives to discourage new development to the MEP, (also see sections II.B.2.i.v(a) & (c)), shall be reported in the *second ANNUAL REPORT*.

f. Permittees shall describe in the *second ANNUAL REPORT* policy or policy evaluation(s) within a comprehensive master planning process (as defined in SC R. 61-9 122.26(d)(2)(iv)(A)(2), section II.B.2.c, above) which incorporate storm water quality considerations into land use planning and development and redevelopment activities, particularly in sensitive water areas.

g. After conducting careful evaluations of water quality monitoring data required in Part V of this permit along with inspection and maintenance results, sections II.B.2.i.iv, v(f) & (g) and j.iii-v, below, include resulting water quality improvements obtained in sensitive waters in pertinent *ANNUAL REPORTS*.

h. Results in II.B.2.g, above, shall be utilized to incorporate water quality considerations into site planning and development activities to achieve water quality improvements to the MEP and to protect water quality in the *fourth ANNUAL REPORT*. These procedures, setting specific performance standards for structural and non-structural controls will be incorporated into the following permit re-issuance.

i. During the permit term, permittees shall be responsible for the following:

   i. Continue developing, implementing, and enforcing a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4. The program must ensure that controls that would prevent or minimize water quality impacts are in place;

   ii. Continue developing and implementing strategies which include a combination of structural and / or non-structural BMPs appropriate for the community;

iii. Enforce and revise, as necessary, ordinances or other regulatory mechanisms to address post construction runoff from new development and redevelopment projects to the extent allowable under State or local law;

iv. Continue to ensure adequate long-term operation and maintenance of BMP;

v. Evaluate and modify, as necessary, the rationale statement addressing the overall post-construction element. Individual BMP, measurable goals, and responsible persons for the program must be described. This narrative must be included in the SWMP, and in the *ANNUAL REPORT*. The rationale statement must include the following information, at a minimum:

(a) Description of the existing program to address stormwater runoff from new development and redevelopment projects, including any specific priority areas for this program, and modifications completed during the reporting period

(b) Detailed explanation of how the program is specifically tailored for the local community to minimize water quality impacts and maintain pre-development runoff conditions,

(c) List of non-structural BMP in the program, including, as appropriate:

(1) Policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space, provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation.

(2) Policies or ordinances and incentives (parts II.B.2.d & e and j.i) that encourage infill development in higher density urban areas, and areas with existing storm sewer infrastructure;

(3) Education programs for developers and the public about project designs that minimize water quality impacts; and

(4) Measures such as: minimization of the percentage of impervious area after development, use of measures to minimize directly connected impervious areas, and source control measures often thought as good housekeeping, preventive maintenance and spill prevention.

(d) Structural BMP in the program, including, as appropriate:

(1) Storage practices such as wet ponds, and extended-detention outlet structures;

(2) Filtration practices such as grassed swales, bioretention cells, sand filters and filter strips; and,

(3) Infiltration practices such as infiltration basins and infiltration trenches

(e) Mechanisms (ordinance or other regulatory mechanisms) to be used in addressing post-construction runoff from new development and redevelopment and why that mechanism was chosen. Include a copy of the relevant sections of the mechanism with the program,

(f) Reasonable assurance that long-term operation and maintenance (O&M) of the selected BMP will take place, ensuring that future O&M responsibilities are clearly identified including an agreement between any of the permittees with another party such as post-development landowners or regional authorities.

(g) Process to evaluate the success of these measures.

j. Site Performance Standards, Plan Review, Maintenance, Inspections & Enforcement

MS4 must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4.

This program must ensure that controls are in place that would prevent or minimize water quality impacts. MS4 must:

- Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMP) appropriate for the community;

- Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, or local law; and

- Ensure adequate long-term operation and maintenance of BMP.

BY the *second ANNUAL REPORT*, permittees must have implemented this program in order to control stormwater discharges from new development and redeveloped sites that disturb at least one acre (including projects that disturb less than one acre that are part of a larger common plan of development or sale, LCP) that discharge into a MS4. The program must apply to private and public development sites, including roads.

The Post-Construction Stormwater Management Program shall ensure that controls are in place to meet the performance standards below to the MEP and to prevent or minimize water quality impacts.

i. *Site Performance Standards*

Permittees must establish, implement and enforce a requirement that owners or operators of new development and redeveloped sites discharging to the MS4, which disturb greater

than or equal to one acre (including projects that disturb less than one acre that are part of a LCP), design, install, implement, and maintain stormwater control measures that approximate pre-development conditions to the MEP and protect water quality by the *second ANNUAL REPORT*.

New Development Standards to be used can be either one, combination, or equivalent combination of design strategies, control measures, practices or provisions such as infiltration, evapotranspiration, rain harvesting, and stormwater reuse and recharge that demonstrate the runoff reduction and pollutant removal necessary to maintain pre-development conditions to the MEP and to protect water quality. The first inch of runoff must be addressed. Appendix A contains examples of specific standards that could be adopted. Permittees must describe the site design strategies, control measures and other practices deemed necessary by the MS4 to maintain, or in the case of redevelopment improve, pre-development hydrology in order to meet these requirements.

- **Incentives for Redeveloped Sites.** - When considered at the watershed scale, certain types of developed sites can either reduce existing impervious surfaces, or at least create less 'accessory' impervious surfaces. MS4 may develop a program to allow adjustments to the performance standard for new development or redevelopment sites that qualify. See section II.B.2.e, above

ii. *Site Plan Review*

In order to ensure that all applicable new development and redeveloped sites conform to the performance standards required above, permittees must implement project review, approval, and enforcement procedures

Permittees must perform site plan reviews of all new development and redeveloped sites which will disturb greater than or equal to one acre and discharge to the MS4 (including sites that disturb less than one acre that are part of a LCP). The site plan review must specifically address how the project meets the site performance standards (section II.B.2.j.i, above) and how the project will ensure long-term maintenance as required below.

iii. *Long-Term Maintenance of Post-Construction Stormwater Control Measures*

Structural stormwater control measures installed and implemented to meet the Site Performance Standards must be maintained in perpetuity. Permittees must ensure the long-term maintenance of structural stormwater control measures.

- *Verification of maintenance responsibilities***.** - Permittees must require that property owners or operators of any new development or redeveloped site subject to the Site Performance Standards to provide verification of maintenance for the approved structural stormwater control measures used to comply with the performance standards.

iv. *Tracking of Post-Construction Stormwater Control Measures*

- *Inventory of Post-Construction Stormwater Control Measures*. - Permittees must maintain an inventory of all post-construction structural stormwater control measures installed and implemented at new development and redeveloped sites, including both public and private sector sites located within the permit area. At a minimum, the inventory shall contain all BMP constructed since the effective date starting with the effective date of this permit.

v. *Inspections and Enforcement*

(a) *Initial Post-Construction Inspection***.** – No later than 30 days of completion of construction of any project required to meet the site performance standards, MS4 must conduct a post-construction inspection to verify that BMP have been installed as per approved plans. Permittees must include in the SWMP a mechanism for being notified by construction operators/owners of their completion of active construction so that the post-construction inspection may be conducted.

(b) *Long Term Inspection Frequency***.** - To ensure that all stormwater control measures are operating correctly and are being maintained consistent with their maintenance agreements, permittees must conduct inspections of each project site addressed under established Site Performance Standards, Section II.B.2.j.i, above, *at least one time during the permit term*. Description of inspection procedures must be included in the SWMP document by the *second ANNUAL REPORT*.

(c) *Inspection Reports*. - Permittees must document its inspection findings in an inspection report. Permittees must document and maintain records of inspection findings and enforcement actions and make them available for review by the permitting authority.

k. Written Standard Operating Procedures (SOP)

The ***Structural Controls and Storm Water Collection System Operation and the Areas of New Development and Redevelopment*** elements of the SWMP, subparts II.B.1 & 2, above, must be effectively addressed in accordance to a written SOP no later than 18 months from the effective date of the permit. The components described below, must be clearly specified in the SOP by the *first ANNUAL REPORT*.

i. A MS4 inventory of Structural Controls and Storm Water Collection System and of Post-Construction BMP in areas where new development and redevelopment has taken place.

ii. Agreements where maintenance responsibilities are clearly specified must be in place.

iii. The transition from construction to post-construction maintenance responsibilities shall be clearly defined in Notices of Termination (NOT), as-built plans, or similar procedures.

iv. Vegetation over-grow, sediment accumulation, trash & debris removal, erosion control, where applicable, PHF management and maintenance required by specific BMP shall be addressed in the maintenance agreements.

v. MS4 and commercially owned, operated or maintained structural controls, storm water collection system and post-construction BMP shall be inspected and maintained, if necessary, yearly. The remaining structural controls, storm water collection system and post-construction BMP shall be inspected and maintained, if necessary, on a 25% / year basis.

vi. Detailed inspection reports with extensive explanation of results and correction actions taken must be part of the MS4 inventory of Structural Controls and Storm Water Collection System and of Post-Construction BMP in areas where new development and redevelopment has taken place.

3. Existing Roadways

Public streets, roads, and highways, including but not limited to unpaved roads, owned, operated, or under the responsibility of the permittee, shall be operated and maintained in a manner to reduce the discharge of pollutants, including those pollutants related to deicing or sanding activities.

The County shall continue to operate a road maintenance program to reduce the discharge of pollutants to the MEP. The following conditions apply:

- Water turnouts, drainage systems designed to reduce the volume and velocity of ditch flow, shall be constructed in conjunction with the roadside drainage ditches in accordance with SC DOT **Requirements for Roadway Drainage.**

- Existing turnouts must direct diverted flow onto vegetated areas where it can be adequately dispersed. The turnouts shall not direct diverted flow or road runoff into waters of the State to the MEP.

The following practices shall be implemented and modified during the permit term, as necessary:

a. *Road Maintenance*: The County shall maintain and modify policies, procedures, or regulatory requirements for the use of structural and nonstructural controls, and shall revise maintenance activities as appropriate to minimize the amount of pollutants that are captured in the stormwater runoff from roadways. Regular inspection and maintenance of these structures as well as the periodic disposal of trash will be part of these activities (sections II.B.1.b, c.ii & iii, d & n; II.B.2.g.i.v(f) & j.iii). The road maintenance component of the Existing Roadways SWMP Element shall address maintenance activities for storm water structures

i. Catch basins,
ii. Roadside ditches,
iii. Proper disposal of accumulated sediments

Management of deicing activities for road purposes including procedures for reducing the impact on receiving waters of pollutants discharged as a result of deicing activities shall be implemented.

b. *Road Construction and Repair*: MS4 crews and hired contractors shall address stormwater quality issues when performing construction activities within permittees' right-of-way. BMP to protect water quality must continue to be implemented to reduce the pollutants in storm water runoff from areas associated with road construction and repair. Implement SOP to address:

i. Practices that include but are not be limited to unpaved roads and all owned or operated equipment yards & maintenance shops that support road maintenance activities,

ii. Amount of soil disturbance must be limited to just the immediate area under repair,

iii. Areas associated with road maintenance should have effective erosion control until stabilized.

iv. Storm water conveyances which are denuded should be re-sodded or seeded & mulched for rapid re-vegetation,

v. In the case of unpaved roads, BMP and structural controls shall be maintained as long as the roads remain unpaved, and,

vi. Scheduling potential pollutant-causing routine repair work during dry seasons, when possible.

vii. Routine inspections of each maintenance facility to ensure that BMP are operational and to determine changes necessary to improve runoff quality.

c. *Road Encroachments*: Spill prevention, material management practices, and good housekeeping shall be considered when issuing encroachment permits.

d. Encourage program(s) where volunteers are periodically called upon to pick up litter and trash along roadways through the MS4` (this requirement may be satisfied through cooperative efforts among all permittees, public agencies, or private entities)

e. Every *ANNUAL REPORT*, Richland County Stormwater Management Division shall report on the Existing Roadways updates.

i. Permittees shall have the Existing Roadways element of the SWMP fully implemented to achieve the "effective prohibition" and "MEP" standards from Section 402(p)(3)(B) of the Clean Water Act by the *second ANNUAL REPORT*.

ii. All improvements to the Existing Roadways element of the SWMP shall be reported in the *fourth ANNUAL REPORT*

4. *Flood Control Projects*

Richland County shall assess flood control projects for water quality. This assessment shall include the evaluation and modification of the following activities to ensure that flood control projects reduce the potential for the discharge of pollutants to the MEP. Permittees shall report on;

a. Policies, procedures, or regulatory requirements utilized in the evaluation of flood control projects. Should the existing policies be found to be deficient in providing water quality protection to the MEP, the County shall provide a regulatory mechanism assessment. Include a revision as needed.

b. The assessment of water quality impacts on receiving water for flood management projects identified in the watershed planning process (or equivalent).

c. New flood control projects shall adhere to the standards set forth in:

   i. SC Water Classifications and Standards (SC Regulation 61-68),
   ii. SC Classified Waters (SC Regulation 61-69) Sections 48-1-10, et seq of the 1976 Code,
   iii. Storm Water Management and Sediment Reduction Act (SC Regulation 72-300) Chapter 14, Title 48, 1976 SC Code as amended, or similarly applicable statute or county ordinance;
   iv. Clean Water Act requirements in sections 401 and 404, whenever and wherever applicable, and,
   iv. The "effective prohibition" and "MEP" standards from Section 402(p)(3)(B) of the Clean Water Act by incorporating water quality considerations into the criteria for flood control design.

d. Assessment of pollution discharge procedures, processes and methods to control the discharge of pollutants from Flood Control Projects into water bodies and publicly owned lakes will be described in the *first ANNUAL REPORT*.

5. *Municipal Facilities*

MS4 must continue to implement a pollution prevention / good housekeeping program for municipal operations. Medium MS4 are required to identify priorities and procedures for inspecting and implementing controls for storm water discharges from landfills and from hazardous waste treatment, storage and disposal facilities. The operation and maintenance program shall include a training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. This element must include employee training to

prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance and MS4 maintenance.

a. *Pollution Prevention / Good Housekeeping for Municipal Operations*

i. Permittees shall continue to implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations as an integral part of the SWMP.

(a) *Municipal Facility and Stormwater Control Inventory* – Permittees must continue to update and maintain an inventory of municipally-owned facilities and of stormwater controls that are not covered under a separate general or individual NPDES permit (i.e. industrial, solid waste, etc.). Examples of these types of facilities may include but are not limited to landfills not addressed under section II.B.8, below, of this permit, composting facilities, equipment storage and maintenance facilities, landscape maintenance on municipal property, material storage yards, public buildings, golf courses, public work yards, recycling facilities, salt storage facilities, municipally owned and/or maintained structural stormwater controls.

(b) Permittees must also include a list of industrial facilities owned or operated by MS4 that are subject to SCDHEC NPDES General Permit for Storm Water Discharges Associated with Industrial Activity (SCR000000) or individual NPDES permits for discharges of storm water associated with industrial activity that ultimately discharge to MS4. Include the SCDHEC permit number or a copy of the Industrial NOI form for each facility.

(c) *Documentation* - The list of municipally owned, or operated, facilities and stormwater controls must be maintained and available for review by SC DHEC.

ii. *Municipally-owned or operated facility assessment*

(a) *Comprehensive Assessment of Pollutant Discharge Potential* – Permittees must assess all municipally-owned or operated facilities identified in Part II.B.5.a.i(a), above, at least once during the permit term and include the assessment in the permit reapplication for their potential to discharge pollutants in stormwater.

(b) *"High Priority" Facilities* – Based on Parts II.B.5.a.ii(a) & iii, permittees must identify facilities that have a high potential to generate stormwater pollutants.

(c) *Documentation of Comprehensive Assessment Results* – Permittees must document the results of the assessments and maintain copies of all site evaluation checklists used to conduct the comprehensive assessment. The documentation must include the results of the permittees' initial assessment, any identified deficiencies and corrective actions taken.

iii. *Facility-Specific Stormwater Management*

Yearly Comprehensive Stormwater Management Inspections Specific for "High Priority" Facilities - Starting no later than 24 months from the effective date of this permit and at least once per year thereafter, a comprehensive inspection of "high priority" facilities, section II.B.5.a.ii(b), above, including all stormwater controls, must be performed by the permittees. Specific attention must be paid to landfills, waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, and similar potential pollutant-generating areas. Non-high priority facilities shall have a comprehensive inspection performed at least once per permit term. All facilities shall be inspected and reported in the FOURTH ANNUAL REPORT as part of RENOTIFICATION.

(a) Municipally owned, or operated, landfills must be inspected twice per year to ensure compliance with applicable industrial stormwater regulatory requirements. BMP to reduce stormwater pollutant loadings must be implemented and maintained. Documentation of these actions is required.

(b) In the particular case of storage piles for de-icing, or other purposes,

(1) If there are storm water discharges associated with the storage piles, i.e. the piles are exposed to precipitation, the piles shall be either enclosed, or covered, to prevent exposure to precipitation, except for exposure resulting from adding material to, or removing material from, the pile.

(2) In order to prevent ground water contamination potential to the MEP, storage piles need to be enclosed, or covered, even where there are no storm water discharges associated with the pile.

(3) Where liquid de-icer is the choice, containment shall be incorporated.

(4) Implement procedures for reducing the impact on receiving waters of pollutants discharged as a result of storage piles for deicing, or other purposes.

(c) Yearly inspection results must be documented and records maintained by the MS4. Inspection reports must also include any identified deficiencies and the corrective actions taken to fix them.

iv. *Employee Training and Education Requirements***. -** Permittees must develop an annual employee training program for appropriate employees involved in implementing pollution prevention and good housekeeping practices. Requirements are similar to those found in part II.B.1.c.iv, above.

b. Permittees shall continue implementation of a program to identify measures to monitor and reduce pollutants in storm water discharges from facilities that handle municipal waste, including sewage sludge. The goal of this investigative portion is to actively identify areas

within these sites with poorer quality discharges during storm events, so that those areas will be given priority when implementing control measures. Each *ANNUAL REPORT* shall,

i. Continue implementation of the SWP3 for all appropriate facilities,
ii. Continue training of the appropriate personnel on SWP3 maintenance, BMP effective implementation, monthly inspection and ongoing record keeping,

c. The Pollution Prevention / Good Housekeeping for municipal waste treatment, storage, or disposal operations program shall contain procedures to identify, evaluate, inspect, and monitor these sites by the *first ANNUAL REPORT*. Permittees will identify and locate all landfills, including those not addressed under section II.B.8, below,, TSD facilities, solid waste transfer stations, fleet maintenance & storage yards, publicly owned treatment works (POTW), and sludge application and/or disposal sites by the *first ANNUAL REPORT*. Based upon evaluations, inspections and monitoring, priorities and procedures for inspections and implementation of control measures to reduce pollutants in the storm water discharges from the identified municipal operation areas (section II.B.5.a) shall be in place by the *second ANNUAL REPORT*.

6. *Application of Pesticide, Herbicide, and Fertilizers (PHF)*

Reduce to the MEP, pollutants in discharges from MS4 associated with the application of pesticides, herbicides and fertilizer which will include, as appropriate, controls such as educational activities, permits, certifications and other measures for commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities

Richland County (coordinated with the Town of Arcadia Lakes and with the City of Forest Acres as appropriate) shall continue to implement controls to reduce, to the *MEP,* the discharge of pollutants related to the storage and application of PHF by employees or contractors, to public rights of way, parks, and other public property. New controls implemented shall be consistent with all applicable rules and regulations.

a. BMP to be used in PHF application activities:

i. Inventory of on-hand PHF with information about the formulations of various products, including:
   (a) Recognition of the chemical constituents from the label,
   (b) Their respective uses,
   (c) Directions and precautions for applicators that explain if products should be diluted, mixed or only used alone, and,
   (d) Proper storage of products;

ii. A decision protocol to determine when mowing or herbicides should be used including application methods and estimated quantities to be used;

iii. Equipment use and maintenance;

iv. Provisions for:

(a) Incorporating native vegetation (as appropriate) for ease of maintenance;
(b) Eliminating spraying programs with minimal or no effectiveness;
(c) Using non-toxic pesticides where practical;
(d) Planting low-maintenance vegetation, such as perennial ground covers, that reduce the requirements for pesticide and herbicide use;
(e) Timing applications for maximum effectiveness by considering growth cycles;
(f) Using efficient chemical management practices such as drift-retardants; and,
(g) Applying during appropriate weather conditions.

v. Training in safe use, storage and disposal of PHF. Details of the Initial Training for Pesticide Applicators may be found at: http://www.clemson.edu/extension/pest_ed/app_training/, and http://www.clemson.edu/public/regulatory/pesticide_regulation/forms/rules_and_regs_dpr.pdf

vi. Inspection and monitoring procedures; and

vii. Record keeping and public notice procedures.

b. Implementation of BMP to achieve the effective prohibition of the discharge of pollutants related to application and distribution of PHF is expected. Permittees shall:

i. Identify all areas known to receive high applications of PHF, develop a program to detect improper usage, and prioritize problem areas,

ii. Require evidence of proper certification and licensing for all applicators contracted to apply pesticides or herbicides on municipal property,

iii. Require that applicators contracted to apply fertilizer are qualified in utilizing proper nutrient management practices,

iv. If utilizing public employee applicators, accomplish training through Clemson Extension Service,

v. Identify, and track all PHF sample points,

c. Implement a program with established procedures for:

i. Minimization of the use of pesticides, herbicides, and fertilizers,
ii. Proper application, storage and mixing these products when, and if, used,
iii. Effective control of PHF application in public right of ways and public facilities,
iv. Compliance with SC DHEC Bureau of Water NPDES General Permit for discharges from the APPLICATION OF PESTICIDES, SCG160000

d. Implement Requirements for Contractors Oversight of PHF applicators as appropriate **(**Part I.B.1.c.v(c) & II.B.3.b**)**

e. Each *ANNUAL REPORT* shall report on the implementation of this *Application of Pesticide, Herbicide, and Fertilizers (PHF)* element.

7. Illicit Discharges and Improper Disposal

Permittees shall continue to implement an ongoing program to detect and eliminate (or require the discharger to the MS4 to eliminate) illicit discharges and improper disposal into the storm sewer system to achieve the "effective prohibition" and "MEP" standards from Section 402(p)(3)(B) of the Clean Water Act and to be consistent with South Carolina Pollution Control Act, Title 48, Chapter 1 of the Code of Laws of South Carolina.

a. *Inspection, Ordinances, and Enforcement Measures:* Non-stormwater discharges to the MS4 shall be effectively prohibited by the Permittees through the use of inspections, ordinances, and enforcement, with exceptions as noted for Allowable Non-Stormwater Discharges (SC R. 61-9 122.26(d)(2)(iv)(B)(1)).

b. Permittees shall continue to implement an illicit discharge and improper disposal element of the SWMP that utilizes the following components to achieve the effective prohibition of the MEP standard:

   i. Successfully implement regulatory control measures to prevent illicit discharges. From THE EFFECTIVE DATE OF THIS PERMIT, permittees shall continue enforcing enacted ordinances prohibiting illicit discharges, specifically illicit connections and illegal dumping, into the MS4. It includes but is not limited to the following legal authority:

      (a) Control through ordinance, permit contract, order or similar means, the contribution of pollutants to the MS4 by storm water discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activity;
      (b) Prohibit through ordinance, order or similar means, illicit discharges to the MS4;
      (c) Control through ordinance, order or similar means the discharge to the MS4 of spills, dumping or disposal of materials other than storm water;
      (d) Require compliance with conditions in ordinances, permits, contracts or orders; and,
      (e) Carry out inspections, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer.

   ii. Continue implementation of existing reporting and inspection procedures that ensure compliance with the effective prohibition of illicit discharges to the MEP,

   iii. Identify non-storm water discharges.

iv. Describe conditions to be placed on other non-storm water discharges, which will be allowed to discharge to the MS4,

v. By the *first ANNUAL REPORT*, implemented a program to uncover illicit connections to the MS4 with updates every *ANNUAL REPORT*. Main components of this program are:
   (a) Enforcement program stressing the inspectors' ability to issue citations,
   (b) Direct link between this Illicit Discharges and Improper Disposal element of the SWMP and the legal authority requirements for the ordinances and orders to implement the effective prohibition of illicit discharges,
   (c) Fine assessment consistent with the effective prohibition and MEP standard for MS4 discharges, §402(p)(3)(B) of Clean Water Act, and,
   (d) Annual schedule for inspections and an allocation of staff and resources.

vi. Maintain an up-to-date inspection database, including enforcement actions and subsequent resolutions, including:
   (a) Annual inspection schedule.
   (b) Allotment of staff and resources,
   (c) Inspections performed
      (1) Consider the potential for illicit discharges and improper disposal is generally higher for areas of older development, areas with many automobile-related industries, and areas with significant numbers of heavy industrial facilities when should be prioritizing inspection schedules in II.B.7.b.vi(a),
      (2) Inspections may be carried out in conjunction with other municipal programs (e.g. pretreatment inspections of industrial users, health inspections, fire inspections, etc.).
      (3) Enforcement actions
      (4) Summary for each permit year provided within each *ANNUAL REPORT*

vii. Evaluate the success of the illicit discharge portion of ordinances or other regulatory mechanisms once per permit term. This assessment shall include any recommended changes to the ordinance or programmatic activities and shall be included as part of the *fourth ANNUAL REPORT*.

c. *Dry Weather Field Screening Program:* Permittees shall continue to implement the field screening analysis program to detect the presence of illicit connections and eliminate improper discharges to the MS4 (or require the discharger to the MS4 to eliminate illicit discharges and improper disposal into the storm sewer system) to achieve the "effective prohibition" and "MEP" standards from Section 402(p)(3)(B) of the Clean Water Act and to be consistent with South Carolina Pollution Control Act, Title 48, Chapter 1 of the Code of Laws of South Carolina. Dry weather field screening shall be completed for all major outfalls once per permit term.

i. *Field screening to detect illicit discharges*. These procedure must be included as part of the illicit discharge and improper disposal element of the SWMP, and must be incorporated into the SOP document. Dry weather field screening may consist, but is not limited to,

(a) Visual observations;
(b) Field screening monitoring; and may include
(c) Analytical monitoring at selected points to the extent necessary to identify and eliminate an illicit discharge in the drainage area of the suspected illicit.

ii. *Conduct Field Screenin*g. Conduct dry weather field screening and / or analytical monitoring, when necessary, to identify the source of illicit discharges. At a minimum, permittees must:

(a) Identify all field screening points within the priority areas identified in sections II.B.7.b.vi & vii where field screening and analytical monitoring, if warranted, will take place. In addition, where permittees are aware of non-stormwater discharges that occur outside of the priority areas, permittees must identify points, outfalls, or major outfalls to conduct field screening in the drainage area of such non-stormwater discharges;

(b) Include the following in the field screening portion of their IDDE program:

(1) Areas and schedule for conducting the screening. - Proposed location of outfalls, or field screening points, should reflect water quality concerns and be aimed at protecting water quality.

(2) A description of which screening methods will be used (i.e. outfall, major outfall, or screening point) and a description as to why it is appropriate for each area,

(3) A description of field screening equipment with their respective methodologies for use.

(4) Conduct all dry weather visual observations and required field screening at each outfall / field screening point. All dry weather screening activities should be conducted after 72-hours of continuous dry conditions following at least 0.10-inch of rainfall.

(5) Document elimination of illicit discharges.

iii. *Field Screening Assessment*. Permittees must assess the effectiveness of the Field Screening component of the illicit discharge and improper disposal element of the SWMP in the *second ANNUAL REPORT* to determine if the level of effort is adequate in attaining the effective prohibition of non-stormwater discharges into the MS4. Where updates are found to be necessary, permittees must make such changes and include them in the *fourth ANNUAL REPORT*.

(a) If illicit connections or illicit discharges are observed related to another MS4 operator(s), then the affected permittee must notify the other operator within a timeframe that is consistent with the procedures found in the SOP.

(b) If another operator(s) notifies a permittee of an illegal connection or illicit discharge to their MS4 then the permittee must follow the requirements specified in Part II.B.7

(c) Screening methodology may be modified based on experience gained during actual field screening activities including a detailed summary of responsibilities for field activity, frequency of inspections, procedures and equipment to be used, and

extensive documentation of screening activities both in the field and in the office in accordance with SC Regulation 61-9 122.26(d)(iv)(B)(3).

(d) While performing field screening activities, permittees shall collect information on outfalls and portions of the MS4 no yet mapped. This updated information shall be added to the database on an ongoing basis, including improvements and refinements of a mapping system, in order to manage field-screening data.

(e) An internal log documenting the results of all field screening performed shall be maintained. This shall include identification of direct and illicit discharges and a surveillance inspection program to effectively address high bacteria count concerns by eliminating all illicit sources to achieve the "effective prohibition" and "MEP" standards from Section 402(p)(3)(B) of the Clean Water Act and to be consistent with South Carolina Pollution Control Act, Title 48, Chapter 1 of the Code of Laws of South Carolina.

(f) Starting on the EFFECTIVE DATE of this permit, the entire watershed for the year shall be screened each year. The entire MS4 shall be screened at least once / 4 years, all outfalls shall be screened by RENOTIFICATION.

(g) Permittees shall identify all of the outfalls that were not identified previously, describing the method used to identify them and list all known major outfalls located in the MS4 on a map by the *first ANNUAL REPORT*.

d. *Investigation of Suspected Illicit Discharges and/or Improper Disposal:* Permittees shall continue to implement SOP to be followed to investigate portions of the MS4 that, based on the results of the field screen or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-storm water in accordance with SC Regulation 61-9.122.26(d)(2)(iv)(B). Notification to the SCDHEC District Office of any illicit connection posing an immediate threat to human health or safety shall be part of the SOP. Effective investigative procedures in the SOP shall identify and terminate the source(s) of illicit connections or discharges to the MS4. As described in the SOP inspection crews will trace suspect dry weather flow upstream, collect water quality samples, will follow through as necessary to investigate and eliminate illicit discharges found. Permittees shall incorporate the following into the illicit discharge and improper disposal element of the SWMP:

i. Identification and tracking of illicit connections or discharge sources in identified watershed areas;

ii. Record of citizen reports;

iii. A response mechanism for citizen complaints, such as a hot line to report suspected illicit discharges and / or improper disposal;

iv. Complete field screening and citizen complaint follow-up;

v. Address all identified instances of illicit connections as soon as possible but in no case later than 10 working days from source identification;

vi. A requirement for immediate cessation of improper disposal practices and the elimination, or proper permitting of the illicit connection as expeditiously as possible.

(a) Legally, there shall be guidelines and procedures for entry and investigation on private property, and protocols to handle potential violators and polluters.
(b) Upon verification of responsible parties, the SOP shall require all necessary corrective actions to eliminate non-stormwater discharge to be conducted and to be concluded within 30 calendar days.
(c) In the event that elimination of the non-stormwater discharge might take longer than the required 30 calendar days, permittees shall require responsible parties to submit a plan with an accelerated schedule to achieve the effective prohibition of the MEP standard ASAP.
(d) In the interim, the permittees shall require the operator of the illicit discharge to take all reasonable and prudent measures to minimize the discharge of pollutants to the MS4, or to rectify any environmental impact associated with an illicit discharge.
(e) A follow-up investigation and field screening, consistent with Part II.B.7.c, to verify that the corrective action taken has, in fact, eliminated the illicit discharge upon being notification by the responsible party that the discharge has been eliminated must be documented by the permittee(s),
(f) Methods of documenting evidence for enforcement procedures consistent with the Clean Water Act shall be in place.
(g) Follow the Enforcement Response Plan and include the resulting enforcement actions in the *ANNUAL REPORT*.

e. *Spill Prevention and Response:* Permittees shall continue to implement the spill-prevention/spill-response plan and procedures, as described in the SWMP, by effectively mitigating potential pollutant discharges to surface or ground waters.

i. Review the existing Richland County Hazardous Material Contingency Plan and supplement wherever needed to address discharges in the MS4.

ii. The Spill Prevention and Response program shall address reporting procedures, spills containment, storage and disposal activities, documentation, and follow-up procedures.

iii. Sources with the greatest potential for spills to occur (or cause the most severe damage) shall be prioritized in the SWMP.

f. *Oils, Toxics, and Household Hazardous Waste Control:* Permittees shall continue the effective prohibition to discharge or to dispose of used motor vehicle fluids, household hazardous wastes, and animal wastes into the MS4.

g. *Limitation of Sanitary Sewer and Septic Seepage:* Permittees shall achieve the "effective prohibition" and "MEP" standards from Section 402(p)(3)(B) of the Clean Water Act in

consistency with the South Carolina Pollution Control Act, Title 48, Chapter 1 of the Code of Laws of South Carolina, as follows,

i. In areas where permittees have authority over the sewer collection system, permittees shall:

   (a) Minimize unpermitted discharges of dry and wet weather overflows from sanitary sewers into the MS4, and,

   (b) Minimize the infiltration of seepage from sanitary sewers and the infiltration of seepage from septic tanks into the MS4

ii. In areas where permittees do not have authority over the sewer collection system, the permittees shall minimize unpermitted discharges of dry and wet weather overflows and the infiltration of seepage from sanitary sewers or septic tanks into the MS4 to the MEP by enacting and enforcing ordinances that effectively prohibit such discharges from sewage and septage systems.

iii. In the interim, permittees are expected to report to the DHEC EQC Office instances where unpermitted discharges of dry and wet weather overflows, or infiltration of seepage from sanitary sewers into the MS4 have been detected by the permittee but have not been corrected by the discharger after sixty days of being detected in spite of permittees' due diligence to address the illicit discharge.

iv. Permittees will detect and address all infiltration, inflow and cross connections through the Public Sewer Districts (PSD) in the MS4. Previously unknown problems shall be addressed upon discovery. Advise appropriate utility owner of violation if constituents common to wastewater contamination are discovered in the MS4 during field screening or routine system inspections.

v. Septic seepage from all areas shall be corrected as follows:

   (a) An approach to eliminate septic system failures shall be in place.
   (b) Seepage from malfunctioning septic systems in areas not served by publicly owned treatment works (POTW) shall be addressed,
   (c) A log of these activities shall be rigorously maintained and summarized in the *ANNUAL REPORT*.

vi. By the *ANNUAL REPORT*, permittees shall update the prohibition of Sanitary Sewer and Septic Seepage as described in the Illicit Discharges and Improper Disposal Element of the SWMP, to limit the infiltration of sanitary sewage and septic seepage into the MS4. The program includes:

   (a) Addressing leaking sanitary sewer lines using detection techniques such as smoke testing, television camera inspection, and test kits for ammonia,
   (b) Actively scheduling sealing of sanitary sewer lines and manhole rehabilitation,

(c) Map to be used in prioritizing the detection schedule.

h. *System map*. – Permittees must develop (if not already completed) a storm sewer system map showing the location of all outfalls, and names and location of waters that receive discharges from those outfalls prior to the SECOND ANNUAL REPORT.

i. *Public Reporting Mechanism***.** Permittees must promote, publicize, and facilitate a reporting mechanism for the public and staff to report illicit discharges and establish and implement citizen request response procedures.

i. Permittees must develop a written spill/dumping response procedure for responding to public notices of illicit discharges, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response

ii. Permittees must conduct reactive inspections in response to complaints and follow-up inspections as needed to ensure that corrective measures have been implemented by the responsible party to achieve and maintain compliance.

iii. Permittees shall continue to maintain a citizen complaint log documenting all reports of illicit discharges and what actions were taken to investigate and resolve the problem throughout the length of the permit. Include a yearly summary of this log in the *ANNUAL REPORT*, see II.B.10.a.i(k).

j. *Employee training***.** – Proper training for field personnel involved in identifying conditions indicative of the presence of illicit discharges and in spill prevention and response for all appropriate municipal field staff, which, as part of their normal job responsibilities, may come into contact with, or otherwise observe, an illicit discharge or illicit connection to the storm sewer system shall be in place. Components of this training are:

i. Annual training program for field investigators,
ii. Checklist to detect illicit connections which shall be filled out at every IDDE investigation,
iii. Step by step process to investigate and identify prohibited illicit discharges,
iv. Map identifying location of suspected problem areas with extensive documentation as why each area is suspect,
v. Special annual training requirements for municipal employees shall address reporting procedures, spills containment, storage and disposal activities, documentation and follow-up procedures and shall emphasizer good housekeeping and material management techniques and,
vi. Recordkeeping of all training and follow up training provided to address this element. Include a summary of training activities in the *ANNUAL REPORT*.

k. Written SOP for implementing the *Illicit Discharge and Improper Disposal* element must be incorporated into the SWMP document by the *first ANNUAL REPORT*.

8. ***Industrial Runoff***

a. Richland County shall continue to implement and enforce a program to identify, monitor and control pollutants in storm water discharges to the MS4 from:

i. Landfills must be inspected annually to ensure compliance with applicable industrial stormwater regulations. BMP to reduce stormwater pollutant loadings must be implemented and maintained. Similar facilities found in the MS4 shall be added to the list for compliance assurance. Thorough written documentation of these activities is expected.
ii. Hazardous waste treatment, storage, disposal (TSD) and recovery facilities;
iii. Facilities that have reported under the requirements of the Emergency Planning and Community Right to Know Act (EPCRA) Title III, Section 313;
iv. The eleven (11) categories of industrial activity as defined in the November 1990 regulations under SC Regulation 61-9 122.26(b)(14). This list shall be maintained and updated annually. Updates shall include permittees on SC DHEC's industrial permittee list; and,
v. Other industrial or commercial discharges identified to be contributing, or having the potential to contribute, substantial pollutants loading to the MS4.

The County shall apply requirements of this element not only to the industrial facilities herein, but also to any facility deemed by the permittees as having significant pollution potential. MS4 must continue to actively conduct evaluations to locate and identify all industrial users contributing to the MS4, both currently those in the database and those entering the system during the permit cycle.

b. Implementation of the Industrial Runoff element of the SWMP shall:

i. Inventory all industrial facilities meeting the criteria outlined in section II.B.8.a above. The inventory shall be updated annually. Updates shall include permittees on SC DHEC's industrial permittee list.

ii. Implement, and modify as necessary, procedures for inspecting industrial facilities. As described in the SWMP, the inspections shall include a written report describing the following:

(a) Type of facility/operation
(b) Discharge location(s) and Waters of the State. Indicate whether receiving waters or wetlands have been impacted.
(c) Material handling and storage practices
(d) Presence of onsite spill containment facilities and staff trained in their use
(e) At a minimum inspect 25% of the facilities inventoried in section II.B.8.b.i, above, each year. Include onsite evaluations of effluent limits and / or benchmark sampling data, see II.B.8.c, below. All facilities must be inspected at least once prior to *RENOTIFICATION*.

(f) Relative potential for contributing significant pollutants to the MS4. Facility inspections must be programmed based on priority facilities, watersheds, and detection or identification of pollution problems. An inspection schedule must be established for each priority facility.
(g) Determination of surface drainage pathways
(h) Location, size and functionality of any structural BMP
(i) Identification of non-structural BMP employed to minimize discharge of pollutants. Follow-up inspections needed to verify the installation and / or performance of a specific control or implementation of a BMP must be established
(j) Physical inspection of each discharge location to determine if an illicit connection exists
(k) The number of inspectors to be employed to perform these tasks during the term of the permit and the minimum frequency for routine inspections shall be established

iii. Specifics steps to be taken when a waste handling site, including landfills, is identified shall be included along with procedures for inspecting priority industrial sites.

iv. Identify facilities identified as conducting industrial activities as described in SC R. 61-9 122.26(b)(14). This includes activities to identify potentially unpermitted sites. For industrial facilities that discharge through the permitted MS4, permittees must have the authority to request confirmation of their coverage under the NPDES General Permit for Industrial Activities or "No Exposure" certification, as well as to allow periodic inspection and public reporting by the MS4 operator no later than the *first ANNUAL REPORT.*

c. *Monitor for Industrial Runoff:* The County shall continue to implement a monitoring (or self monitoring) program (as required in Parts III.A.1, 2.a.viii & b.viii, 3, 4; IV and V) for stormwater discharges associated with:

i. industrial facilities identified in II.B.8.a, above,

v. facilities subject to effluent guidelines (40 CFR Subchapter N), SC R. 61-9 122.26(b)(14)(i),

vi. facilities with existing NPDES permit,

vii. facilities where it is known, or there is reason to believe, that any of the pollutants Tables II, III & IV of Appendix D is present as required under SC R. 61-9 122.21(g)(7)(vi) & (vii).

d. Richland County must have adequate legal authority to:

1. Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the MS4 by storm water discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activity, and,

2. Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and non-compliance with permit conditions. (See subparts II.A, above, and II.F & I, below, in this permit).

e. Each *ANNUAL REPORT* shall,

i. Keep current the list of active industrial users in Richland County,

ii. In the event monitoring data indicates runoff pollution attributable to industrial run off, steps must be taken in the subsequent reporting period to effectively address runoff from the sites so identified.

iii. Include the findings in items II.B.8.a, b & c, above, and,

iv. Detailed analyses produced in section II.B.8.c, above, must be part of the *fourth ANNUAL REPORT*.

9. *Construction Site Runoff*

Permittees shall continue to implement a program to reduce erosion and sedimentation at construction sites to achieve the "effective prohibition" and "MEP" standards from Section 402(p)(3)(B) of the Clean Water Act and to be consistent with South Carolina Pollution Control Act, Title 48, Chapter 1 of the Code of Laws of South Carolina. Storm water discharges during land disturbance activities shall comply with:

- Applicable sections of SC Regulation 61-9 pursuant to the South Carolina Pollution Control Act (48-1-10, et seq, S.C. Code of Laws, 1976);

- SC Regulations 72-300 and 72-400 pursuant to 14-48.10 et. Seq., SC Code, 1976, as amended;

- SC Regulations 61-68 Water Classification and Standards and 61-69 Classified Waters promulgated by SCDHEC pursuant to the South Carolina Pollution Control Act (48-1-10, et seq, S.C. Code of Laws, 1976); and

- The requirements set in the SCDHEC *Bureau of Water Antidegradation for Activities Contributing Nonpoint Source Pollution to Impaired Waters - Maintaining Water Quality Through Storm Water Controls of November 1999* or later, as updated.

Special consideration shall be given to: highly sensitive waters, areas in proximity to drinking water intakes, wetlands, watersheds for which a TMDL has been approved, areas of development and significant redevelopment where Antidegradation for Activities Contributing Nonpoint Source Pollution to Impaired Waters applies and to any watershed draining to an impaired waterbody.

a. *Site Planning and Non-structural & Structural Best Management Practices:*

Permittees shall continue requiring the use and maintenance of appropriate structural and non-structural best management practices to reduce pollutants discharged to the MS4 during the time of construction.

Permittees shall continue implementing construction practices and standards through local ordinance addressing storm water runoff water quality control requirements for all new development and significant redevelopment within MS4. Clearing, grading and land disturbance shall be limited to preserve existing vegetation, including trees, and pervious soils that attenuate, treat and infiltrate rainfall and runoff.

b. *Site Specific Plan Review and Regulatory Procedures:* Permittees must continue implementing, and enforcing a program to reduce pollutants in any stormwater runoff to their MS4 from construction activities. Construction activity for the purpose of this permit includes, at a minimum:

- Clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre
- Clearing, grading, and excavating that result in disturbance of less than one acre of total land area that is part of a larger common plan of development or sale (LCP)

The program must continue implementing:

i. Practices to review construction drawings prior to construction approval to ensure that sediment and erosion control measures during the land disturbance and stormwater management practices are completed and adequate

ii. Ordinances, or other regulatory mechanisms, requiring erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;

iii. Requirements for construction site operators to implement specific erosion and sediment control BMP;

iv. Requirements for the design, installation and maintenance of effective pollution prevention measures for construction site operators to:

(a) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge,

(b) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on site to precipitation and to stormwater runoff that may cause adverse impacts to water quality, and,

(c) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

(d) The following discharges from construction sites are prohibited:

(1) Wastewater from washout of concrete, unless managed by an appropriate control;

(2) Wastewater from washout and cleanout of stucco, paint, from release oils, curing compounds and other construction materials;

(3) Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and,

(4) Soaps or solvents used in vehicle and equipment washing.

v. Requirements for each operator of a construction activity to prepare and submit a site specific Stormwater Pollution Prevention Plan (SWP3), in accordance with the NPDES General Permit for Stormwater Discharges from Construction Activities (SCR100000) or subsequent issuance, prior to the disturbance of land for the MS4 to review and approve;

vi. Plan Review. Permittee must implement site plan review procedures that at a minimum meet the following:

(a) Make clear to operators of construction activity that they are prohibited from commencing construction activity until they receive of written approval of the plans.

(b) Approve SWP3 containing appropriate site-specific construction control measures that effectively meet all regulatory requirements in Section II.B.9 of this permit. The Department has issued an effective NPDES General Permit for Storm Water Discharges from Construction Activities, SCR10000. All construction activity in the State of South Carolina is required to comply with this general permit. To avoid duplication of efforts, Stormwater Management / Erosion Sediment and Reduction Plans reviewed and approved consistent with the technical requirements of SCR100000 and good faith implementation of this element is expected in the SWMP annual review (Sections II.H & VI.A.3.c.vi(i)).

(c) The SWP3 must include the rationale used for selecting control measures, including how the control measure protects a waterway or stormwater conveyance.

(d) Permitted MS4 must use qualified individuals, knowledgeable in the technical review of SWP3 to conduct reviews.

(e) Document the review of each SWP3 plan using a checklist or similar process.

(f) Procedures for SWP3 review, including the review of pre-construction site plans, for construction activity that discharge pollutant(s) of concern to sensitive waters including, but not limited to, wetlands, TMDL waters and to waters on the 303(d) List of Impaired Waters must identify potential water quality impacts the permitted discharges may have. The SWP3 shall limit sediment discharges to the MEP, shall protect water quality. Procedures for SWP3 review shall:

(1) Incorporate consideration of potential water quality impacts,

(2) Include the review of construction site plans,

(3) For construction projects that disturb less than 25 acres, carefully evaluate all selected BMPs and their ability to control the pollutant(s) of concern.

(4) For construction projects that disturb 25 acres or more, require a written quantitative and qualitative assessment showing that the selected BMP will control the discharge of the pollutant, or pollutants, of concern from construction and post construction within a TMDL watershed, or to a water on the 303(d) List of Impaired Waters, and,

(5) Require that SWP3 prepared by construction activity applicants for SMS4 review and approval must demonstrate that stormwater discharges will neither cause nor contribute to a violation of water quality standards.

The most current TMDL / 303(d) List is available at:

http://www.scdhec.gov/tmdl

c. *Construction Site Inspections*

MEP for this component of the Construction Site Runoff element is to ensure; that adequate measures are in place prior to the commencement of construction activity, that will continue to be implemented to protect water quality and that any water quality-related requirement of this element is followed as contained in the approved plans.

i. Permittees must maintain an inventory of all active construction projects. The inventory must be continuously updated as new projects are permitted and projects are completed. Permittees must make the inventory available to SC DHEC upon request. As part of this inventory,

(a) Permittees must track the number of inspections for the inventoried construction sites throughout the reporting period to verify that the sites are inspected at the minimum frequencies required,

(b) Document inspections and enforcement activities for each site in the inventory.

(c) Include relevant contact information for each project (name, address, phone number, construction site operator, company name, etc.) in the inventory.

(d) Include the size of the project and area of land disturbance.

ii. Permittees must implement procedures for inspecting construction projects in accordance with the frequency specified in table II.B.9.c.ii.

Table II.B.9.c.ii
Construction Site Inspection Frequency

Site	Inspection Frequency
a. All sites *5 acres* or larger in size	All new approvals must be inspected initially within the first two weeks of commencement of land disturbing activity. All active sites shall be inspected at least monthly during construction. All inactive sites shall be inspected at least bi-monthly
b. All sites one (1) acre or larger that discharge to a tributary listed by the state/tribe as an impaired water for sediment, turbidity, or BIO under the CWA section 303(d)	
c. All sites determined to be a significant threat to water quality*	
d. All other construction sites with one (1) acre or more of soil disturbance not meeting the criteria specified in a, b, or c above	Inspection must occur at least monthly
e. Final Inspection	Inspect all permitted projects to ensure that all graded areas have reached final stabilization and that all temporary control measures are removed and permanent stormwater management BMP are permitted as required
* In evaluating the threat to water quality, the following factors must be considered: soil erosion potential; site slope; project size and type; sensitivity of receiving waterbodies; proximity to receiving waterbodies; non-stormwater discharges; past record of non-compliance by the operators of the construction site; proximity to sensitive water bodies; and, other factors relevant to MS4.	

iii. Permittees must adequately inspect all phases of construction. At a minimum, inspections must occur following installation of initial BMP, during active construction, and after final site stabilization.

iv. Once final site stabilization is verified, the transition where post-construction maintenance responsibilities commence shall be clearly defined in Notices of Termination (NOT), as-built plans, or similar procedures.

v. Permittees must have trained and qualified inspectors. Permittees must continue to implement:

(a) Procedures to notify building permit applicants, in developments subject to the stormwater regulations, of their application responsibilities under the NPDES permitting program for construction site runoff.

(b) An effective communication process with construction contractors to educate them on areas in which improvements are needed and to enforce any required actions.

(c) Training programs for inspectors (regardless of specialty) who are likely to be on site during earth moving activities in proper erosion control techniques.

(d) Retain at least one Certified Stormwater Operator/Inspector on staff at all times (these individuals shall be either field supervisors, heavy equipment operators actively involved in County earth moving activities, or engineering staff responsible for specifying erosion control measures for Permittees activities)

(e) Provide permit applicants with notice of the availability of training for construction projects involving significant earth moving activities.

(f) Include a summary of procedures in the *ANNUAL REPORT* for incorporation into the SWMP and conduct presentations to professional organizations associated with the construction industry to discuss proper site management for water quality, see II.B.10.a.i(k).

vi. Permittee must also continue to follow, and revise as necessary, written procedures outlining the inspection and enforcement procedures. Inspections of construction sites must, at a minimum:

(a) Check for coverage under SCR100000 by requesting a copy of any application or Notice of Intent (NOI), the stamped approved stormwater pollution prevention plan or other relevant application form during initial inspections.

(b) Review the applicable stormwater pollution prevention plan and conduct a thorough site inspection to determine if control measures have been selected, installed, implemented, and maintained according to the plan.

(c) Assess compliance with the permittee's ordinances and permits related to stormwater runoff, including the implementation and maintenance of designated minimum control measures.

(d) Assess the effectiveness of control measures.

(e) Visually observe and record non-stormwater discharges, potential illicit connections, and potential discharge of pollutants in stormwater runoff.

(f) Provide a written or electronic inspection report generated from findings in the field.

d. *Construction Site Enforcement*:

Permittee must develop an Enforcement Response Plan (ERP). The ERP must contain a description of how Permittees would use specific type of responses to address various types of violation. The ERP shall include, but is not limited to:

i. Types of response;

(a) Verbal warnings,

(b) Written notices, and

(c) Escalated enforcement measures such as citations, fines, stop work orders, etc.

ii. Specific strategies for escalating enforcement response, where necessary, to address persistent, repeat or escalating violations.

iii. Ensure ERP is reasonably effective in reducing pollutant discharges to the MEP and to protect water quality.

iv. Require notices of termination (NOT) when construction activities are closed (final stabilization). This can be done in conjunction with as-built plans, occupancy permits or similar actions. Once final site stabilization is verified, Post-construction maintenance responsibilities commence as required in this permit.

e. Every *ANNUAL REPORT*, Richland County shall report on**,**

i. Effectiveness of the Stormwater Management Division enforcement response plan.

ii. Improvements to the Standard Operating Procedures (SOP) for the Construction Site Runoff Element that:

(a) Standardize the enforcement escalation procedures for non-compliant sites;
(b) Implement the SOPs for conducting inspections;
(c) Implement the schedules for inspections, including, but not limited to, frequency and triggers;
(d) Implement the SOPs for contacting other County agencies regarding MS4 items; and,
(e) Document inspection and enforcement activities for each active site.

10. Public Education & Public Participation:

Permittees must continue to implement a public education program to distribute educational materials or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

a. Public Education and Outreach on Storm Water Impacts

i. Within the first year of the permit, permittees shall continue to implement, and revise if necessary, a comprehensive stormwater education/outreach program in accordance with items noted below.

(a) Identify the pollutant(s) of concern (POC) within the municipality's defined watershed area(s).

(b) Analyze the POC identified in II.B.10.a.i(a), above, to be targeted. For example, target areas where there are significant trash issues and / or concerns;

(c) Initiate a planning process that defines the goals and objectives of the program as they relate to at least three high priority community issues with potential to decrease the POC's effect on water quality. Include formative and summative evaluation within the planned goals and objectives. Program goals and objectives must include short-term goals geared to increase awareness of the issue as well as longer-term goals geared to affect behavior change to the maximum extent practicable (MEP).

(d) Identify and analyze the audience(s) that is believed to have an influence on the POC identified in II.B.10.a.i(a) above and that are believed to have influence on the goals and objectives identified in II.B.10.a.i(c) above (i.e., identify the target audience(s)).

(e) Create appropriate message(s) in accordance with the program goals and objectives that is designed to invoke a desired response in the targeted audience(s).

(f) Develop an appropriate education campaign and/or materials as needed to convey any messaging created in accordance with program goals and objectives and based on knowledge of the target audience(s). Campaign items and materials can utilize various media such as printed materials, billboard and mass transit advertisements, websites, social media or other special events.

(g) Determine methods and process of distribution for campaign materials in accordance with a knowledge base of the target audience(s) (i.e. what is the best way to reach the audience using their preferred mode(s) of communication).

(h) To the MEP, utilize quantitative and/or qualitative formative evaluation assessments to guide and/or change the program goals and objectives and/or program activities as needed. Evaluate the effectiveness of the program.

(i) Utilize public input to the MEP (e.g., the opportunity for public comment, public meetings, or other relevant sources) in the development of the Public Education and Outreach on Storm Water Impacts element of the SWMP.

(j) During the permit coverage, the program goals and objectives identified must be implemented to the MEP.

(k) There will be an assessment of the stormwater education/outreach program annually as specified in section VI.A.3.c.vi(j) of this permit. The permittee must adjust their educational materials and the delivery of such materials to address findings resulting from these assessments.

ii. Conduct education and outreach at least once per year to broaden the understanding of green infrastructure as a NPDES initiative and low impact development MS4 wide. This effort shall include workshops and / or models for contractors that emphasize:

(a) Cost benefit analysis showing the effectiveness of green infrastructure (GI) & low impact development (LID) and their positive impact on the local economy.

(b) LID / GI Site selection consideration.

(c) Opportunity provided by BMP retrofits.

(d) These could be included in sections a.i(c) – (i), above and / or incorporated in conjunction with b.iii & c, below.

iii. Pesticide, Herbicide and Fertilizers (PHF) Application - Permittees must continue to implement the public education and the public participation programs to encourage the public to reduce their use of pesticides, herbicides, and fertilizers. The program will include program elements to assist homeowners in minimizing residential use of pesticides & herbicides and in improving landscape design and maintenance to protect the environment and restore native habitats. The program may include placing brochures/pamphlets prepared on these pertinent topics in public buildings for distribution to the residents and publishing a semi-annual article/notice in a community newsletter announcing the availability of these materials and providing tips for homeowners of ways to reduce their use of pesticides, herbicides and fertilizers.

iv. Illicit Discharges and Improper Disposal - Permittees must continue to implement a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges, improper disposal of materials, and water quality impacts associated with discharges from/into the MS4. The program must include a mechanism for the public to report illicit discharges to the MS4. The program must have provisions to educate the public about illicit discharges and about the problems associated with illicit connections or discharges. It must also inform the public on what to look for and how to report incidents found. The program must also inform the public on the existing stormwater ordinances and emphasize the benefits of a successful stormwater management program.

v. Oils, Toxics and Household Hazardous Waste Control - Permittees must continue to implement the outreach program, as described in the SWMP, to instruct the public on responsible environmental management and disposal of household hazardous waste. Permittees must also facilitate the proper disposal of used oil and toxics from households. The program must include continuous noticing (web or print) to inform the public of the proper disposal methods for used oil and toxics from households and of the locations and hours of operation of Richland County and retail collection sites that will accept used motor oil, leftover hazardous household products, lead acid batteries, and white goods.

vi. Construction Site Runoff - Permittees must continue to conduct appropriate education and training measures for construction site operators and those associated with the implementation of proper sediment & erosion control measures at construction sites. This training is in addition to any certification from reputable Sediment and Erosion Control programs.

vii. Animal Waste - Permittees shall continue to implement the animal waste component of the public education program. Pet owners and others must be educated about the highly adverse impact this source, once transported via runoff, may have on water quality. Permittees will work with pet owners, homeowners associations, or others as it may be appropriate to incorporate a stormwater quality message to minimize the stormwater pollution potential associated with animal waste. The *ANNUAL REPORT* shall contain the pollution reductions expected from the BMP specified.

viii. Litter Control Program – Reduce the amount of trash entering waters of the State MS4 wide through actions taken by local governments, the business community, and individual citizens.

ix. Permittees must include an assessment of the progress in public awareness and behavior with respect to the targeted POC resulting from the implementation of the Public Education component of this element in the *fourth ANNUAL REPORT*.

b. Public Participation. Permittees are required to involve the public in the planning and implementation of activities related to the development and implementation of the SWMP. The Public Involvement portion of this element provides, among other things, a forum and a structure by which to encourage, or to allow, the public to participate. There may be specific ways the public might be involved, based on a program particular needs. For instance, you may want stream watch groups to be organized. As such, the proposed program should describe how this will be accomplished, and the time schedule to do so. At a minimum permittees shall:

i. Create opportunities for citizens to participate in the implementation of stormwater controls (e.g., stream clean-ups, storm drain stenciling, volunteer monitoring, public and / or private partnership for litter prevention and behavior modification, and educational activities).
ii. Ensure the public can easily find information about the permittee's SWMP.

iii. Implement Construction Site Public Involvement procedures for receipt and consideration of information submitted by the public, and

iv. Incorporate written procedures for implementing the Public Education, Public Participation & Training, see II.B.10.c below into the SWMP.

c. Training components have been incorporated throughout the permit. Table II.B.10.c, below, summarizes permit sections with applicable training requirements.

Table II.B.10.c
Training Requirements

Section	Element Requirement
II.B.1.a.v	Structural Controls Storm Water Collection System Operation
II.B.1.c.iv	Storm Sewer System maintenance Activities MS4 Maintenance Employee Training and Education Requirements
II.B.3	Existing Roadways Conduct training for roadway crews
II.B.5.a.i, iv & b.ii	Municipal waste treatment, storage, or disposal facilities Pollution Prevention / Good Housekeeping for Municipal Operations
II.B.6.a.v, b.iv & VI.A.3.c.vi(f)	Application of Pesticide, Herbicide and Fertilizers (PHF) Clemson Extension Service Certification training
II.B.7.j	Illicit Discharges and Improper Disposal, Investigation of Suspected Illicit Discharges and / or Improper Disposal & Spill Prevention Employee training
II.B.8.a.ii	Industrial Runoff
II.B.9.c.v & VI.A.3.c.vi(i)	Construction Site Runoff Construction Site Inspections Training and certification of inspectors
II.B.10.a.ii, b.iv & c	Public Education, Participation & Training Public Education and Outreach on Storm Water Impacts Construction Site Runoff

C. **Area-specific SWMP Requirements.** Permit requirements for specific SWMPs are formulated to maintain or improve water quality standards. Section 401 review is initiated by a federal permit. Some of the activities mentioned in the permit (like areas of new development) may require a 401 Certification if they directly involve impacts to waters of the State (including wetlands). Structural practices should be placed on upland soils to the degree attainable as the installation of these and other devices may be subject to Section 404 of the Clean Water Act.

D. **Deadlines for Program Compliance.** As provided in Parts II and III, compliance with the SWMP shall be required, as indicated in the schedule, from the effective date of the permit. It does not preclude the permittee from carrying out elements of the SWMP in advance of the dates scheduled or beyond the boundaries scheduled in the permit.

E. **Roles and Responsibilities of Permittees.** The SWMP shall clearly identify the role and responsibility of permittees, as well as procedures to ensure effective coordination. Following the effective date of the permit, the SWMP portions developed and implemented must be included in the *ANNUAL REPORT* covering the permit year in which they were developed and implemented. Being covered as a co-permittee under this individual permit means that you remain subject to the enforcement actions and penalties for the failure to comply with the terms of the permit in your jurisdiction.

Sharing Responsibility: Permittees may share the responsibility to implement one or more of the SWMP elements with one another. One entity may fully take over an element, component, the whole SWMP, a requirement, or the entire permit. Permittees may rely on one another if and only if:

1. The other permittee, in fact, implements the control measure,

2. The particular element, or component thereof, is at least as stringent as the corresponding permit requirement, and,
3. The other permittee agrees to implement the control measure on your behalf.

4. Reporting Requirements

    a. In the *ANNUAL REPORT* required under part VI.A the permittee must specify the reliance on another permittee to satisfy some, or all, of the permit obligations.

    b. If a permittee is relying on another permittee to satisfy all the permit obligations, including the obligation of filing all required reports on his behalf,

        i. That fact must be clearly stated in the SWMP,
        ii. The relying permittee is not required to file the required reports,
        iii. The relying permittee remains responsible for compliance with his permit obligations if the other permittee fails to implement the element, component, the whole SWMP, a requirement, or the entire permit as the case may be.

    c. Permittees sharing responsibilities with another permittees must enter legally binding agreements. These legally binding agreements must:

        i. Comply with applicable NPDES Signatories requirements,
        ii. Be included in the *first ANNUAL REPORT*,
        iii. Ensure compliance with implementation of the permit responsibility shared,
        iv. Be maintained as part of the SWMP description, and,
        v. Be kept up-to-date in the *ANNUAL REPORT* when any changes may take effect.

F. **Legal Authority.** To the extent allowed by law, each permittee, shall ensure legal authority to control discharges to and from those portions the MS4 over which it has jurisdiction eighteen months from the effective date of this permit. This legal authority may be a combination of statute, ordinance, permit, contract or order with adequate existing legal authority to accomplish items 1 - 7 below.

1. Control the contribution of pollutants to the MS4 by illicit discharges or improper disposal and identify storm water discharges associated with industrial activity within the permitted areas, their compliance status with NPDES regulations, and the quality of storm water discharged from sites of industrial activity;
2. Prohibit illicit discharges to the MS4;
3. Control the discharge of spills and the dumping or disposal of materials other than storm water (e.g. industrial and commercial wastes, trash, used motor vehicle fluids, leaf litter, grass clippings, animal wastes, etc.) into the MS4;
4. Control the contribution of pollutants from one portion of the MS4 to another;
5. Require compliance with conditions in ordinances, permits, contracts or orders;
6. Carry out, or require, all inspection, surveillance and monitoring procedures necessary to determine compliance with permit conditions; and,
7. Provide incentives, or disincentives to encourage measures in the community that reduce non-point source pollution.

G. **SWMP Resources.** Permittees shall provide a description of financial resources available to comply with this permit. The description must include:

1. Permittee(s) budget(s) for the SWMP shall contain:

    a. An overview of the MS4 financial resources and budget,
    b. Overall indebtedness and assets,
    c. Sources of funds for storm water programs, and,
    d. Identification of all departments within the permittee's jurisdiction that conduct stormwater-related activities. Identify departments and/or positions (including contact information) responsible for implementing the SWMP.

2. A fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the monitoring and SWMP required in this permit shall contain:

    a. A description of the funding sources proposed to meet the necessary expenditures, and
    b. Legal restrictions on the use of such funds.

3. The *ANNUAL REPORT* shall include:

    a. Revisions, if necessary, to the fiscal analysis reported under parts II.G.1 and 2, above, including a description of staff resources necessary to meet the requirements of this permit, and,
    b. Annual expenditures and budget for the year following the *ANNUAL REPORT*.

H. Storm Water Management Program Review and Modification.

1. *Program Review:* The permittees shall participate in an annual review of the current Storm Water Management Program (SWMP) in conjunction with preparation of the *ANNUAL REPORT* required under Part V of the permit. An assessment of controls, also identifying known impacts described in Part I.C.1.e, is expected under section VI.A.3.d.vi.

2. *Program Modification:* The permittee(s) may modify the SWMP during the life of the permit in accordance with the following procedures:

   a. Modifications adding components, controls, or requirements to the approved SWMP may be made by the permittee(s) at any time. A description of the modification shall be included within the subsequent *ANNUAL REPORT*.

   b. Modifications replacing an ineffective or infeasible BMP specifically identified in the SWMP with an alternate BMP may be made by the permittee(s) at any time. A description of the replacement BMP shall be included in the subsequent *ANNUAL REPORT* along with the following information:

      i. An analysis of why the former BMP was ineffective or infeasible (including cost prohibitive);
      ii. Expectations on the effectiveness of the replacement BMP; and,
      iii. An analysis of why the replacement BMP is expected to achieve the goals of the BMP which was replaced.

   c. Modifications to adjust the schedule for maintenance activities or the frequency of inspections or monitoring identified in the SWMP may be made by the permittee(s) on an annual basis. The permittees must include in the subsequent *ANNUAL REPORT* a description of the schedule adjustment along with the following information:

      i. An analysis of why the former schedule was ineffective or infeasible;
      ii. Expectations on the effectiveness of the replacement schedule; and
      iii. An analysis, if applicable, of why the replacement schedule will ensure the optimization of equipment use.

   d. Modifications subtracting components, controls, or requirements of the SWMP may not be made by the permittee(s) UNLESS it can be clearly demonstrated that with the elimination of this component, the SWMP will continue to achieve a reduction in pollutants to achieve the "effective prohibition" and "MEP" standards from Section 402(p)(3)(B) of the Clean Water Act and shall not cause or contribute to violations of the South Carolina Pollution Control Act and Water Quality Classification and Standards. In the case where this type of modification is appropriate, the permittee(s) may make the required modification and shall include it in the subsequent *ANNUAL REPORT*, a description of the component which has been eliminated along with the following information:

i. An analysis of why the component was ineffective or infeasible,
ii. Assurance that the proposed elimination of the component will neither cause a transfer of contaminants to ground water, nor contribute to exceeding water quality standards, and,
iii. A detailed explanation of why, with the proposed elimination of the component, the SWMP will continue to achieve a reduction in pollutants to the MEP without causing or contributing to exceeding water quality standards, South Carolina Pollution Control Act Chapter 1 Title 48 of the Code of Laws of South Carolina.

e. Modifications included within the *ANNUAL REPORT* shall be signed in accordance with Part VII.H. by all directly affected permittees, and shall include a certification that all affected permittees were given an opportunity to comment on proposed changes.

3. *Transfer of Ownership, Operational Authority, or Responsibility for Storm Water Management Program Implementation:* Permittee(s) shall implement the SWMP on all new areas added to their portion of the Municipal Separate Storm Sewer System (or for which they become responsible for implementation of storm water quality controls) as expeditiously as practicable. Implementation of the program in any new area shall consider the plans in the SWMP of the previous MS4 ownership.
Prior to land annexation, the permittee shall include a schedule for extending the SWMP to the annexed areas. At least 30 days prior to transfer of operational authority or responsibility for SWMP implementation, all parties shall prepare a schedule for transfer of responsibility for SWMP implementation on the affected portions of the MS4. This schedule shall be included in the *ANNUAL REPORT*.

4. *Sharing Responsibility:* Permittees may share the responsibility to implement one or more of the SWMP elements with one another. One entity may fully take over an element, component, the whole SWMP, a requirement, or the entire permit. Permittees may rely on one another if and only if:

a. The other permittee, in fact, implements the control measure,

b. The particular element, or component thereof, is at least as stringent as the corresponding permit requirement, and,

c. The other permittee agrees to implement the control measure on your behalf.

d. Reporting Requirements

i. In the annual report required under Part VI, the permittee must specify the reliance on another permittee to satisfy some, or all, of the permit obligations.

ii. If a permittee is relying on another permittee to satisfy all the permit obligations, including the obligation of filing all required reports on his behalf,

(a) That fact must be clearly stated in the SWMP,

(b) The relying permittee is not required to file the required reports,
(c) The relying permittee remains responsible for compliance with his permit obligations if the other permittee fails to implement the element, component, the whole SWMP, a requirement, or the entire permit as the case may be.

iii. Permittees sharing responsibilities with another permittees must enter legally binding agreements. These legally binding agreements must:

(a) Comply with applicable NPDES Signatories requirements,
(b) Be included in the *first ANNUAL REPORT*,
(c) Ensure compliance with implementation of the permit responsibility shared,
(d) Be maintained as part of the SWMP description, and,
(e) Be kept up-to-date in the *ANNUAL REPORT* when any changes may take effect.

I. Enforcement Response Plan (ERP).

1. Permittees shall implement within *12 months from the effective date of this permit,* and revise as necessary, an enforcement response plan (ERP), which sets out permittee's potential responses to violations and addresses repeat and continuing violations through progressively stricter responses as needed to achieve compliance.

2. ***Enforcement Tracking***. Permittees shall track instances of non-compliance either in hard-copy files or electronically.

3. ***Recidivism Reduction***. – Permittees must summarize inspection results by consuetudinary violators and include incentives, disincentives, or an increased inspection frequency at the operator's sites.

4. Enforcement components are inserted in their appropriate elements throughout this permit. Table II.I.4, below, lists the constituents of the ERP that must be fully implemented by the *first ANNUAL REPORT*.

Table II.I.4
ERP Components

Section	ERP Component
I.C	Effectively Regulate Pollutant Discharges to the MS4
II.A	SWMP Enforced
II.B.2.c.v	Richland County Comprehensive Plan
II.B.2.e.ii	Water Quality Design Criteria
II.B.2.i.i	New and Re-Development Post Construction Requirements
II.B.2.i.iii	Ordinances addressing II.B.2.i.i above
II.B.2.i.iv	Adequate long-term operation and maintenance of BMP
II.B.2.j.	Site Performance Standards enforced through Plan Review, Maintenance & Inspections
II.B.2.j.i	Site Performance Standards Requirement
II.B.2j.ii	Site Performance Standards Required for Plan Approval
II.B.2.j.iii	Verification of Long-Term Maintenance Responsibilities enforced
II.B.2.j.v(c)	Inspection Reports
II.B.6	PHF Controls
II.B.7.a	Effective Prohibition of Non-Storm Water Discharges
II.B.7.b.v(a)	IDDE
II.B.7.b.viii(c)	Inspections & Enforcement Database
II.B.7.d.vi(f&g)	ERP consistent with the Clean Water Act
II.B.8.a	Control Pollutants from Industrial and High Risk Runoff
II.B.8.c & II.F	Enforce additional regulations enacted
II.B.9.c.i(b) & iv	Effectively enforce Construction Site Runoff ERP component
II.B.9.d & e	ERP Response, SOP, *ANNUAL REPORT*
II.B.10.a.v(b)	Enforce required actions
II.E	Co-permittees responsibilities
II.I	Implementation
VI.A.1.c.vi(b)	New Development and Redevelopment Policies Enforced
VI.A.1.c.vi(g)	Effective Prohibition Enforced
VI.A.1.c.vi(i)	Construction Site Runoff Element Fully Enforced
VI.A.1.d.iii	Full Enforcement of Each and Every SWMP Element Expected

PART III
WATER QUALITY BASED EFFLUENT LIMITATIONS (WQBEL)

A. WQBEL

1. MS4 discharges have the reasonable potential to cause or contribute to Water Quality Standards (WQS) exceedances. System-wide WQBEL, expressed throughout the elements of the SWMP address WQS by requiring standards of performance, effective prohibitions, BMP, and schedules to be met. WQBEL throughout this permit are appropriate to satisfy technology requirements; namely, reducing the discharge of pollutants to the MEP, to protect water quality and to meet WQS. In addition to system-wide WQBEL to control pollutants to the MEP as required in §402(p)(3)(B)(iii) of the CWA, there are specific WQBEL emphasized in areas where TMDL are approved, where impaired water quality monitoring stations (WQMS) exist and in areas draining to sensitive waters. The Department has established these requirements to effectively address pollutant(s) of concern contributions from MS4 sources in order to protect water quality. These WQBEL are based on consideration of existing in-stream concentrations.

2. ***TMDL***. The Department has included the following provisions from the SWMP elements in Part II.B, above, to address the pollutant of concern (POC) where, based on approved TMDL, progress toward the wasteload allocation (WLA) for the POC is required to be demonstrated in order to protect water quality. TMDL have been established for Dissolved Oxygen (DO) and for *Escherichia Coli (E.Coli)*.[1] as POC. Conditions below are consistent with the assumptions and requirements of WLA in established TMDL listed in Appendix C of this permit.

   a. *Dissolved Oxygen (DO)* - The following WQBEL specifically apply, in the manner prescribed, to watersheds draining to WQMS impaired for DO:

      i. Pollutants (including floatables) from all conveyances (including roadways) must be controlled. It must be demonstrated that removal efficiency of oxygen depleting pollutants for BMP implemented to this effect must approximate the WLA / WQS.

      ii. Management objectives for streams and wetlands in the watershed shall clearly address the WLA / WQS.

      iii. Where new development occurs, the "effective prohibition" and "MEP" standards from Section 402(p)(3)(B) of the CWA shall be in full force to protect water quality. To that effect:

         (a) BMP with the best removal performance for oxygen depleting substances must be implemented to the MEP.
         (b) Forested stream buffers and wetlands shall be protected to the MEP.
         (c) Impervious surfaces shall be minimized to the MEP.

1 Where FC has been indicated as POC, *Escherichia Coli (E.Coli)* is the more appropriate indicator. A fact sheet explaining the WQS change from FC to *E.Coli* and the new targets for WLA established for freshwater TMDL is included in Appendix B of this permit.

iv. Where redevelopment occurs, water quality must be improved when upgrading, or replacing MS4 components to meet the WLA / WQS as follow:

(a) Discharge of oxygen depleting pollutants in stormwater runoff from developed areas shall be reduced to achieve the WLA / WQS, through design, installation and perennial maintenance of stormwater control measures that approximate pre-development levels to the "MEP" standards from Section 402(p)(3)(B) of the CWA in order to protect DO water quality standards.

(b) Water quality design criteria shall be enforced to the MEP.

(c) Forested riparian buffers will be restored to the MEP.

(d) Redevelopment water quality requirements to include incentives to encourage re-development at the watershed scale.

v. Flood Control Projects shall be assessed to ensure that no further degradation due to DO depression will take place.

vi. Municipal operations, and activities, in the watershed must eliminate their potential to discharge oxygen depleting pollutants.

vii. The effective prohibition of oxygen depleting pollutants presence in stormwater runoff due to the PHF application must be in full force and effect.

viii. The effective prohibition of oxygen depleting pollutants presence in stormwater runoff due to disposal of used motor vehicle fluids, household hazardous wastes, grass clippings and leaf litter must be in full force and effect.

ix. Measures to identify, monitor and control oxygen depleting substances from industrial runoff to the full extent must be in place.

x. Structural and non-structural BMP aimed to abate oxygen depleting substances in stormwater runoff associated with construction activity shall be required throughout DO impaired watersheds through:

(a) Site Planning
(b) DO impaired watershed specific plan review procedures
  (1) Approval contingent upon appropriate site-specific control measures that effectively prevent oxygen depleting substances in stormwater runoff associated with construction activity.
  (2) Ensuring that control measures prevent oxygen depleting pollutants from gaining entrance to waterways, or stormwater conveyances.
  (3) Document how consideration for DO was addressed during plan review.
  (4) Controls to address potential oxygen depleting substances impacts must be supported by a quantitative and qualitative rationale.

(c) Installation and maintenance of effective oxygen depleting pollutant prevention measures must be rigorously inspected during construction activity to ensure their performance.
(d) Enforce provisions contained in section III.A.2.a.ix.

xi. Education and outreach efforts in the impaired watershed must prioritize DO impacts

b. Escherichia Coli (E.Coli) - The following WQBEL specifically apply, in the manner prescribed, to watersheds draining to WQMS impaired for *E.Coli*:

i. Structural controls, including flood control projects, detaining large amounts of water over a period of time shall be managed to prevent increased bacteria levels.

ii. The storm sewer system shall be proactively maintained with the frequency necessary to ensure that pathogens will not be discharged.

iii. Management objectives for streams and wetlands in the watershed shall clearly address the WLA / WQS.

iv. Where new development occurs, the "effective prohibition" and "MEP" standards from Section 402(p)(3)(B) of the CWA shall be in full force to protect water quality. To that effect:

(a) BMP with the best removal performance for pathogens must be implemented to the MEP.

(b) Forested stream buffers and wetlands shall be protected to the MEP.

(c) Impervious surfaces shall be minimized to the MEP.

v. Where redevelopment occurs, water quality must be improved when upgrading, or replacing MS4 components to meet the WLA as follow:

(a) Discharge of bacteria in stormwater runoff from developed areas shall be reduced to achieve the WLA / WQS, through design, installation and perennial maintenance of stormwater control measures that approximate pre-development levels to the "MEP" standards from Section 402(p)(3)(B) of the CWA in order to protect *E.Coli* water quality standards.

(b) Water quality design criteria shall be enforced to the MEP.

(c) Forested riparian buffers will be restored to the MEP

(d) Redevelopment water quality requirements to include incentives to encourage re-development at the watershed scale.

vi. Municipal activities, and operations, in the watershed must eliminate their potential to discharge pathogens.

vii. All illicit discharges of sewage and /or seepage must be detected and eliminated. These include dry and wet weather overflows from sanitary sewers, infiltration of seepage from sanitary sewers and from septic tanks. The "effective prohibition" in 402(p)(3)(B)(ii) of the CWA is applicable to these non-stormwater discharges. Fully documenting the total eradication of these discharges is required.

viii. Measures to identify, monitor and control bacteria presence in industrial runoff to the full extent must be implemented.

ix. Structural and non-structural BMP aimed to abate pathogens presence in stormwater runoff associated with construction activity shall be required throughout *E.Coli* impaired watersheds through:
   (a) Site Planning
   (b) *E.Coli* impaired watershed specific plan review procedures
      (1) Approval contingent upon appropriate site-specific control measures that effectively prevent oxygen depleting substances in stormwater runoff associated with construction activity.
      (2) Ensuring that control measures prevent bacteria constituents from gaining entrance to waterways, or stormwater conveyances.
      (3) Qualified, knowledgeable individuals must conduct these technical reviews.
      (4) Document how consideration for *E.Coli* was addressed during plan review.
      (5) Controls to address potential pathogen impacts must be supported by a quantitative and qualitative rationale.
   (c) Installation and maintenance of effective pathogen pollutant prevention measures must be rigorously inspected during construction activity to ensure their performance.
   (d) Enforce provisions contained in section III.A.2.b.ix.

x. Education and outreach efforts in the impaired watershed must prioritize bacteria impacts. In addition to *Structural Controls and Storm Water Collection Systems, including Flood Control, Areas of New Development and Redevelopment, Municipal Operations, Illicit Discharges and Improper Disposal and Industrial Runoff, including Construction,* Animal Waste shall be addressed

c. Water quality results of measures implemented in subparts III.A.2.a & b, above, must be documented in detail and shall be reported starting on the *second ANNUAL REPORT*.

3. ***Impaired Water Quality Monitoring Stations (WQMS)***

In a manner similar to III.A.2, above, SWMP provisions established herein specifically address stormwater sources potentially causing or contributing to the impairments listed.

a. *For all impaired WQMS for all pollutants* Determine whether discharges from any part of the MS4 contribute directly, or indirectly, to waterbodies with impaired WQMS listed in the 2014 303(d) list. This determination shall be included in the *first ANNUAL REPORT*.

b. WQBEL apply to discharges authorized under this permit that contribute directly, or indirectly, to waterbodies with WQMS impaired for *DO*:

   i. Potential significant contributors to the DO impairment from your MS4 shall be identified by the *first ANNUAL REPORT*.

   ii. Include progress on implementation and DO reductions in every *ANNUAL REPORT*.

c. WQBEL apply to discharges authorized under this permit that contribute directly, or indirectly, to waterbodies with WQMS impaired for *Escherichia Coli (E.Coli)*. Progress on implementation and *E.Coli* reductions to be included in every *ANNUAL REPORT*.

d. The following WQBEL apply to discharges authorized under this permit that contribute directly, or indirectly, to waterbodies with WQMS impaired for *BIO*:

   i. Potential significant contributors (stressors) to BIO impairments from your MS4 shall be identified by the *first ANNUAL REPORT*.

   ii. Applicable components of the **SWMP Requirements** must be fully implemented to effectively address stormwater discharges determined to contribute directly, or indirectly, to BIO impairments by the *second ANNUAL REPORT*.

   iii. Corrective course of action and Water Quality Improvements in WQMS impaired for BIO to be included every *ANNUAL REPORT*.

e. The following WQBEL specifically apply, in the manner indicated, to discharges authorized under this permit that contribute directly, or indirectly, to waterbodies with WQMS impaired for *Cu*:

   i. Potential significant contributors to the Cu impairment from your MS4 shall be identified by the *first ANNUAL REPORT*.

   ii. Water Quality Improvements in WQMS impaired for Cu shall be included every *ANNUAL REPORT*.

4. ***Sensitive Waters***

There are waters classified as Outstanding National Resource Waters (ONRW), Outstanding Resource Waters (ORW), Trout Put Grow and Take Waters (TPGT) and Source Water Protection areas (SWPA).

a. *For all sensitive waters listed in Appendix E*, WQBEL described in this section apply to discharges authorized under this permit that contribute directly, or indirectly, to these waterbodies,

i. In the *first ANNUAL REPORT*, identify contribution of pollutants to sensitive water bodies from the MS4. For any specific parameter(s) in the WQS of the Sensitive Waters identify potential pollutants or surrogate parameters.

(a) Based on these potential sources, listed in general categories or as specific sites, prioritize identification of potential pollutant sources for the different waters.

ii. By the *second ANNUAL REPORT*, review results to date from your Illicit Discharge Detection and Elimination program and other monitoring conducted in previous permit terms. Determine if additional monitoring is necessary. Prioritize future IDDE to eradicate these occurrences. Priority for additional monitoring and IDDE detection shall be given to discharges to sensitive waters.

iii. By the *second ANNUAL REPORT*, develop (or modify the existing program as necessary) and implement a public education program to reduce the contributions of each of the sources identified in section III.A.4.a.i, above. Priority for implementation of education and outreach initiatives shall be given to audiences located in areas discharging to sensitive waters.

iv. By the *third ANNUAL REPORT*, conduct a thorough evaluation of each of the elements of the SWMP required in Subpart II.B of this permit to determine if the existing program must be modified, or additional BMP implemented to address WQ concerns identified in section III.A.4.a.i. Within each SWMP element, priority for implementation and modification of BMP shall be given to eliminating pollutant sources located in areas discharging into sensitive waters.

v. Aquatic life and recreational uses must be protected

b. *For waterbodies containing segments classified as ONRW*, the following WQBEL protect the narrative water quality criterion and maintain water quality conditions for these sensitive waterbodies.

i. Water quality conditions with respect to color, DO (BOD_5 & NH_3N), bacteria, pH, temperature, turbidity and other parameters shall be maintained and protected to the MEP, including consideration of natural conditions and protection of upstream and / or downstream waters, as applicable.

c. *For waterbodies containing segments classified as ORW*, the following WQBEL protect the narrative water quality criterion and maintain water quality conditions for these sensitive waterbodies.

   i. Water quality conditions with respect to color, DO (BOD_5 & NH_3N), bacteria, pH, temperature, turbidity and other parameters shall be maintained and protected to the MEP, including protection of upstream and / or downstream waters, as applicable. Particular attention shall be paid to turbidity in Big Lake.

d. *For waterbodies containing segments classified as TPGT*, the following WQBEL protect the narrative water quality criterion for these sensitive waterbodies.

   i. Water quality conditions with respect to DO (BOD_5 & NH_3N), pH temperature and turbidity shall be maintained and protected to the MEP. Particular attention shall be paid to DO (BOD_5 & NH_3N), temperature and turbidity to the Saluda River (Main stem portion and unnamed tributaries) from the Lake Murray Dam to the confluence with Broad River.

e. *SWPA, including groundwater protection areas,* should be afforded the protection necessary to support their uses through SWMP implementation to the MEP. SWPA activities shall be addressed along with WQBEL for all sensitive waters in III.A.4.a, above.

f. Attainment of intended uses and maintenance of water quality standards must be documented every *ANNUAL REPORT*.

5. Include in your annual reports progress on WQBEL implementation and pollutant reductions.

B. EXCLUSION FROM SAMPLING AND ANALYTICAL MONITORING

1. ***Historical Data***. Over previous permit terms, permittees have conducted sampling for pollutants outlined in SC R. 61-9 122.26(d)(2)(iii).

   a. *Outfalls Wet Weather Sampling.* For each parameter identified in Table III.B.1.a, below, permittee must evaluate, using previously obtained data, the presence of these pollutants at each outfall. If previous characterization and other technical factors demonstrate that the pollutant is not present in MS4 discharges and that there is no increase in the pollutant due to MS4 discharges, permittee may forego sampling and analysis for the particular parameter.

Table III.B.1.a
Outfall Wet Weather Characterization

Stormwater Runoff Parameters (all Units in mg/L unless otherwise indicated)	
Total Suspended Solids (TSS)	Total Dissolved Solids (TDS)
Chemical Oxygen Demand (COD)	Biochemical Oxygen Demand (BOD)
Oil & Grease	pH
E.Coli	Nitrate (NO_3-N) + Nitrite (NO_2-N) Nitrogen
TKN	Nitrate (NO_3-N) + Nitrite (NO_2-N)
Dissolved Phosphorus	Total Ammonia + Organic Nitrogen
Total Phosphorus	Total Recoverable Lead (Pb)
Total Recoverable Copper (Cu)	Table II & Table III (toxic metals, cyanide & phenols
Total Recoverable Zinc (Zn)	

b. *Water Quality Sampling.* For parameters identified in Table III.B.1.b which were sampled quarterly in the Richland County Regional Ambient Monitoring Program under previous permit terms, permittee must evaluate the pollutant presence. If previous monitoring results and other technical factors demonstrate that WQS are met, as applicable, and the intended uses are attained, permittee may decrease the frequency of sampling and analyses for the particular pollutant to bi-annually and direct sampling and analyses effort to satisfy the monitoring required in Part IV of the permit.

Table III.B.1.b
Water Quality Sampling

RICHLAND COUNTY REGIONAL AMBIENT MONITORING PROGRAM QUARTERLY SAMPLING		
In-Situ	Laboratory	
Depth	E. Coli	Total Phosphorus
pH	Surfactants (MBAS)	TKN
Temperature	Residual Chlorine	Ammonia
Dissolved Oxygen	Fluorides	Nitrate (NO_3-N)
Conductivity	Turbidity	Nitrate (NO_3-N) + Nitrite (NO_2-N)
	Oil & Grease	Chlorophyll a, b,c & pheophytin
	TSS	Potassium

c. *Sediment, Macroinvertebrate and Dissolved Oxygen (BOD_5 & NH_3N) Monitoring*. Sediment sampling has been conducted and analyzed for percent silt / clay, fecal coliform, and eight metals (mercury, cadmium, copper, lead, zinc, arsenic, nickel, and aluminum) as required in previous permits. Permittee must evaluate the results for these parameters.

   i. If previous monitoring results and other technical factors demonstrate that WQ is not adversely affected, as applicable, and the intended uses are attained, permittee may decrease the frequency or forego sampling and analyses for the particular parameter and direct sampling and analyses effort to satisfy the monitoring required in Part IV of the permit.

   ii. Where procedures and methodology such as modeling, data analyses and calculations, substantially demonstrate reduction trend(s) of POC from stormwater discharges and / or attainment of WQS and / support of intended uses, permittee may decrease the frequency of sampling to no less than one pr permit cycle to satisfy monitoring required in Part IV of this permit.

d. Wherever any of the parameters listed in sections III.B.1.a – c, above, are identified as a POC for TMDL, Impaired, or Sensitive Waters area, as applicable (Sections III.A.2 – 4, above), the exclusion from monitoring is not available and permittees must follow requirements outlined in Part IV. .

e. Permittees must identify in the *first ANNUAL REPORT* which parameters will be excluded based on the evaluation of previous data.

   i. All analytical data submitted may include information generated during previous permit terms to satisfy provisions in III.B, herein.

   ii. Should a pollutant previously excluded from sampling becomes present, or become a WQ concern, in MS4 discharges, monitoring for that particular pollutant must be reinstated.

   iii. Justification to grant exclusions from sampling and analytical monitoring shall be extensive including but not limited to POC load and concentration; data trend analysis; spatial and time considerations; land uses & drainage areas; procedures and methodology such as modeling, analysis and calculations among other factors to support the sampling exclusion provisions sought under III.B.1.a - c above.

f. Provisions contained in this sampling and analytical monitoring exclusion do not supersede any permit, or regulatory requirement, and is consistent with the Clean Water Act (CWA).

PART IV
MONITORING REQUIREMENTS

A. Monitoring Requirements

Permittees shall develop, or continue to implement, water quality monitoring programs required in this part. Water quality goals of the monitoring program are:

1. Reduction of pollutants in stormwater runoff MS4-wide to the MEP (III.A.1),
2. Progress toward the WLA of approved TMDL (III.A.2 & IV.B),
3. Water quality improvements in impaired WQMS (III.A.3, IV.C & V.B), and
4. Attainment of intended uses and maintenance of water quality standards (III.A.4 & IV.D)

B. TMDL

Appendix C outlines TMDL in the MS4 area. It should be noted that each monitoring station is considered to be a separate TMDL

MS4 discharges are part of existing wasteload allocations (WLA). Permittees shall:

1. Prioritize the existing TMDL in Appendix C. Include a schedule to complete and submit TMDL Implementation Plans, in the *first ANNUAL REPORT*. WQBEL specified in subpart III.A.2, as applicable, must be at the core of all TMDL Implementation Plans.

2. Submit TMDL Implementation Plans, including WQBEL, for the first four (4) TMDL, as prioritized in IV.B.1, to SC DHEC Bureau of Water with the *second ANNUAL REPORT*.

3. Submit TMDL Implementation Plans, including WQBEL, for the second four (4) TMDL, as prioritized in IV.B.1, to SC DHEC Bureau of Water with the *third ANNUAL REPORT*.

4. Submit TMDL Implementation Plans, including WQBEL, for the last five (5) TMDL, as prioritized in IV.B.1, to SC DHEC Bureau of Water with the *fourth ANNUAL REPORT*.

5. For newly established TMDL approved by EPA after the effective date of this permit with WLA assigned to MS4 discharges, permittees shall:

    a. Review SWMP requirements for the control of stormwater discharges to WQMS identified in the TMDL. MS4 discharges of the POC to TMDL waters located in the TMDL watershed draining to the impaired WQMS shall be identified no later than six (6) months from the approved date of the newly established TMDL (effective date).

    b. Incorporate a Monitoring and Assessment Plan in the SWMP for the newly established TMDL no later than twelve (12) months from the approved date of the newly established TMDL (effective date).

i. The monitoring component of the Monitoring and Assessment Plan shall include a schedule for conducting monitoring. Monitoring activities shall be initiated no later than eighteen (18) months from the approved date of that TMDL (effective date).

(a) The following factors shall be addressed in the monitoring component of the Monitoring and Assessment Plan:

(1) Type of monitoring proposed,
(2) Frequency and Representativeness of Sampling,
(3) POC loadings expressed in appropriate units consistent with the WLA,
(4) Location and other factors reflective of the MEP standard of the CWA
(5) Strategies used to characterize the POC e.g in-stream, and / or outfall monitoring,
(6) Representation of the entire TMDL watershed,
(7) Sampling protocols used, and,
(8) Progress on POC characterization
- For each pollutant of concern, permittees shall report on the progress of the characterization of the relative pollutant levels from various MS4 discharges to TMDL waters. Resulting data shall be included in every *ANNUAL REPORT* following the commencement of monitoring for TMDL pollutant characterization.

(b) The assessment portion of the Monitoring and Assessment Plan shall include the following:

(1) Process and schedule for assessing monitoring data to prioritize areas of the TMDL watershed that will be targeted for BMP implementation,
(2) Process and schedule for selection of appropriate BMP that will implement the TMDL, will protect water quality, and will be consistent with the assumptions and requirements of the WLA,
(3) Updates to TMDL Monitoring and Assessment Plans to be submitted in each *ANNUAL REPORT*, and,
(4) Progress on the TMDL Monitoring and Assessment Plan to be documented in the *ANNUAL REPORT*.

6. TMDL Implementation Plans submitted to SC DHEC Bureau of Water under subparts IV.B.2 – IV.B.5 for the existing TMDL, and for all newly established TMDL approved after the effective date of this permit, shall describe the following:

   a. Assessment of the sampling and analytical data. This assessment should include, where available,

      i. Analysis of available long-term data to show trends,
      ii. Consideration of the variable nature of stormwater and,
      iii. Availability of reliable and applicable field data supporting the expected treating efficiencies of proposed BMP.

   b. Prioritization of areas targeted for BMP implementation and underlying rationale;

   c. Inclusion of WQBEL identified in Part III for the POC;

   d. Structural and nonstructural BMP to address the WLA. Permittees should include a brief explanation of why the BMP are selected (e.g., expected load reductions or percent of capture); and,

   e. Schedule for completing BMP implementation as soon as practicable. The schedule shall describe:

      i. All BMP implementation activities that are expected to occur during the current and the next permit term, if applicable,

      ii. In addition to the BMP implementation activities that are expected to occur during the current permit cycle, statistically significant monitoring, necessary to evaluate BMP implementation effectiveness and to corroborate the water quality environmental benefit derived from the BMP implementation shall be conducted for a period of no less than two (2) years immediately following BMP implementation in the TMDL watershed.

      iii. BMP implemented according to this schedule are WQBEL. As such, they shall:

         (a) Demonstrate sufficiency to implement the WLA
         (b) Ensure progress toward the WLA by tracking the BMP implementation

      iv. BMP implementation activities required under parts IV.B.6.d.i - iii, above, must be included in the *ANNUAL REPORT*.

   e. TMDL Implementation Plans scheduled to occur within the term of this permit shall be implemented. Schedules and TMDL Implementation plans herein also become part of the re-application process.

f. Progress on TMDL Implementation, shall be documented in the *ANNUAL REPORT;*

   i. Analysis of the monitoring data is required,
   ii. BMP performance must be ascertained, and,
   iii. Progress toward the WLA is expected.

g. Should attainment of the goal of meeting the WLA extend beyond the permit term in spite of demonstrated progress, addressing the WLA will be incorporated for the permit renewal.

h. Iterative revisions of the BMP Implementation portion of the TMDL Implementation Plan must be conducted for as long as the intended uses are not supported.

i. Progress toward the WLA, as required in sections III.A.2.c & 5, above, indicated in WQBEL for MS4 discharges found to be contributing to TMDL impairments, sections III.A.2.a & b, shall be monitored as scheduled below:

   i. Starting 24, 36 and 48 months from the effective date of this permit for existing TMDL prioritized in sections IV.B.2, 3 & 4, respectively.
   ii. Starting 18 months from the effective date of newly established TMDL approved by EPA as indicated in section IV.B.5 above

j. If intended uses are fully supported during two consecutive 303(d) Listing Cycles for a particular TMDL, no further action on the permittee's part is needed for that TMDL.

k. Should there be no water quality improvement of the discharges from permitted MS4 resulting from BMP not performing properly toward the goal of meeting the WLA, permittees are required to implement additional control measures to make improvements to the MS4 TMDL implementation plans.

C. Impaired Water Quality Monitoring Stations (WQMS)

Impairments identified on the 2014 303(d) List are found in Appendix D of this permit. For MS4 discharges from any part of the MS4 determined to contribute directly, or indirectly, to the impairment listed in Appendix D, the following monitoring requirements will apply.

2. MS4 discharges to the WQMS impairments listed in Table IV.C.1, below, shall be monitored starting 12 months after the effective date of this permit.

3. MS4 discharges to the WQMS impairments listed in Table IV.C.2, below, shall be monitored starting 24 months after the effective date of this permit.

4. Procedures in this section, IV.C, shall apply when subsequent 303(d) Lists are issued (i.e. 2016, 2018, etc.).

Table IV.C.1
First Batch of Impaired WQMS to be monitored

WQMS	DESCRIPTION	CLASSIFICATION	USE	CAUSE
C-071	CEDAR CK AT S-40-734	FW – Flowing into ORW	AL	BIO
C-076	CEDAR CK CANOE ACCESS OFF S-40-1288 (SO CEDAR CK RD)	ONRW	REC	ECOLI
C-077	CEDAR CREEK IN CONGAREE NATIONAL PARK - WESTON LAKE LOOP TRAIL BRIDGE B	ORW	REC	ECOLI
S-950	TOM'S CREEK AT RED BLUFF RD.	FW – Flowing into ORW	AL	pH[2]
S-950	TOM'S CREEK AT RED BLUFF RD.	FW – Flowing into ORW	REC	ECOLI

2 Based on existing WQ data, the WQMS should be listed for BIO, not pH. BIO is partially supported and the WQMS is therefore "impaired" due to BIO. The site was last sampled for BIO and presumably pH in 2004; it was impaired for BIO at that time.

Table IV.C.2
Second Batch of Impaired WQMS to be monitored

WQMS	DESCRIPTION	CLASSIFICATION	USE	CAUSE
B-080	BROAD RIVER DIVERSION CANAL COLA WTR PLANT[3]	FW	REC	ECOLI
B-081	CRANE CK US 321	FW	AL	BIO
B-280	SMITH BR N MAIN ST (US 21)	FW	AL	BIO
B-316	CRANE CK AT S-40-43 UNDER I-20	FW	AL	DO
B-801	WATEREE CRK AT SR 698	FW	AL	BIO
C-021	MILL CK AT SC 262	FW	REC	ECOLI
C-072	TOMS CK AT SC 48	FW	REC	ECOLI[4]
C-073	REEDER POINT BR AT SC 48	FW	REC	ECOLI
C-074	CONGAREE RIVER, WEST BOUNDARY OF CONGAREE SWAMP MONUMENT	FW	REC	ECOLI
C-579	TOMS CREEK AT POWER LINE AND RR TRACK	FW	AL	BIO5
RS-09323	LIGHTWOOD KNOT BRANCH TRENHOLM RD EXTENSION	FW	AL	BIO
CW-250	COLONELS CK SC 262	FW	AL	CU

3 WQBEL indicated for this water under section III.B.4.e

4, 5 POC reduction and water quality improvements from these WQMS shall be included in the second batch of WQMS required in section IV.C.2 to be monitored starting 24 months after the effective date of the permit.

D. Sensitive Waters including SWPA

Appendix E lists waterbodies in the MS4 area containing segments classified as Outstanding National Resource Waters (ONRW), Outstanding Resource Waters (ORW), or Trout Put Grow and Take (TPGT). For all contribution of pollutants to sensitive waters identified in section III.A.4.a, above, monitoring to demonstrate the biological integrity and water quality of the receiving waterbodies as required in III.4.f and 5 must be in place as follows.

1. Waterbodies listed in table IV.D.1, below shall be monitored, as required in III.A.4.f and 5, above, starting 12 months after the effective date of this permit.

Table IV.D.1
First Batch of Waterbodies with Sensitive Classified Segments to be Addressed

Waterbody Name	Classification	Waterbody Description
Cedar Creek	FW	Portion of the creek outside the boundary of Congaree National Park
Cedar Creek	ONRW	Portion of the creek beginning at the boundary of Congaree National Park to Wise Lake
Cedar Creek	ONRW	Portion of the creek beginning at Wise Lake to confluence with Congaree River
Toms Creek	FW	Portion of the creek outside boundary of the Congaree National Park
Toms Creek	ORW	Portion of the creek beginning at the boundary of the Congaree National Park to its confluence with Cedar Creek

2. Waterbodies listed in table IV.D.2, below shall be monitored 24 months, respectively, after the effective date of this permit.

Table IV.D.6
Remaining Waterbodies with Sensitive Classified Segments to be Addressed

Waterbody Name	Classification	Waterbody Description
Big Lake	ORW	Entire lake within the boundaries of Congaree National Park
Dry Branch	ORW	Portion of the stream beginning at the boundary of the Congaree National Park to Weston Lake
Dry Branch	FW	Portion of the branch outside the boundary of Congaree National Park
McKenzie Creek	FW	Portion of the creek outside the boundary of Congaree National Park
McKenzie Creek	ORW	Portion of the creek beginning at the boundary of the Congaree National Park to its confluence with Toms Creek
Myers Creek	FW	Portion of the creek outside the boundary of Congaree National Park
Myers Creek	ORW	Portion of the creek beginning at the boundary of the Congaree National Park to its confluence with Cedar Creek
Old Dead River	ORW	Entire river within the boundary of the Congaree National Park
Running Lake Ck	FW	Portion of the creek outside the boundary of Congaree National Park
Running Lake Ck	ORW (FW)	Portion of the creek beginning at the boundary of the Congaree National Park to its confluence with Toms Creek
Saluda River (Main stem)	FW	Entire river tributary to Lake Murray

PART V
SAMPLING COLLECTION AND ANALYTICAL REQUIREMENTS

A. Sample Types.

Sample data collection may consist of outfall, water quality, sediment, benthic, or dissolved oxygen measurement strategies, or combination of these, as necessary to demonstrate water quality improvements required in the permit.

1. ***Outfall sampling***, where selected, shall be conducted in the following manner.

   a. Location of outfalls for sampling required in Parts II, III & IV, above, should reflect water quality concerns to the MEP and must be representative of the drainage area being addressed. These outfalls shall be inventoried, prominently identified in a map and in a database and kept up-to-date.

   b. For each outfall required to be sampled in Parts II, IIII & IV, above, stormwater discharge samples shall be collected from three storm events occurring at least one month apart in accordance with the requirements in SC R. 61-9 122.21(g)(7) (the Department may allow exemptions to sampling the required storm events when climatic conditions create good cause for such exemptions).

   c. Date, duration of the storm event sampled, rainfall estimate of the storm event which generated the sampled discharge and the duration between the storm event sampled and the end of the previous measurable (> 0.1 inch rainfall) storm event must be tracked;

   d. Analyses for the parameters listed in Table V.A.1.d, below, shall be in accordance with analytical methods approved under 40 CFR Part 136. When no analytical method is approved, permittee may use any suitable method but must provide a description of the method.

   e. For sampling described in V.A.1.a-d, above, quantitative data shall be provided for parameters indicative of the water quality concern to be addressed from the list provided in Table V.A.1.e below.

   f. Estimates for each outfall identified in V.A.1 of the seasonal pollutant load and of the event mean concentration for any constituent detected in any sample conducted in V.A.1.a –e.

Table V.A.1.e
Outfall Quantitative Data

Stormwater Runoff Parameters (all Units in mg/L unless otherwise indicated)	
Total Suspended Solids (TSS)	Total Dissolved Solids (TDS)
Chemical Oxygen Demand (COD)	Biochemical Oxygen Demand (BOD)
Oil & Grease	pH
E.Coli	Nitrate (NO_3-N) + Nitrite (NO_2-N) Nitrogen
TKN	Nitrate (NO_3-N) + Nitrite (NO_2-N)
Dissolved Phosphorus	Total Ammonia + Organic Nitrogen
Total Phosphorus	Total Recoverable Lead (Pb)
Total Recoverable Copper (Cu)	Table II & Table III (toxic metals, cyanide & phenols
Total Recoverable Zinc (Zn)	

2. ***In-stream*** water quality sample collection, where suitable, shall:

   a. Be of sufficient frequency, at least quarterly, to determine statistically significant seasonal pollutant loadings.

   b. Have a spatial distribution to ensure representativeness.

   c. Utilize existing monitoring stations already approved for water quality monitoring programs to the MEP.

   d. Parameters chosen for analysis should reflect water quality concerns to the MEP.
      - i.e., if eutrophic conditions are present, TP, TN and Chlorophyll A shall be determined.

   e. Parameters analyzed for the quarterly sampling in the existing Richland County Regional Ambient Monitoring Program are summarized in Table V.A.2.e, below.

   f. For each TMDL watershed, impaired WQMS or sensitive waterbody segment listed (III, IV & V.A), if not already started, sampling shall commence concurrently with the scheduled requirements of part IV for that particular waterbody.

      - i.e., randomly deployed continuous DO meters to assess the diurnal dissolved oxygen minimum in water bodies where this parameter is of concern should be used.

Table V.A.2.e
In-Stream Water Quality Sampling Collection

RICHLAND COUNTY REGIONAL AMBIENT MONITORING PROGRAM QUARTERLY SAMPLING		
In-Situ	Laboratory	
Depth	E. Coli	Total Phosphorus
pH	Surfactants (MBAS)	TKN
Temperature	Residual Chlorine	Ammonia
Dissolved Oxygen	Fluorides	Nitrate (NO_3-N)
Conductivity	Turbidity	Nitrate (NO_3-N) + Nitrite (NO_2-N)
	Oil & Grease	Chlorophyll a, b,c & pheophytin
	TSS	Potassium

3. ***Sediment, Macroinvertebrate and Dissolved Oxygen (BOD_5 & NH_3N) Monitoring.***

Permittees shall continue to implement sediment, benthic and dissolved oxygen monitoring programs as indicative of the water quality condition required to be monitored. Sample collection location shall be defined in the SWMP as required in this permit. Sampling events shall be completed according to the schedule outlined in the monitoring plan. The plan, including time frame and parameters to be sampled, shall be defined in the SWMP and included as part of the *ANNUAL REPORT*.

a. For TMDL watersheds, impaired WQMS and/or sensitive waters listed in Parts III, or IV of this permit, found to have pollutants in bottom sediments, where MS4 discharges in fact contribute directly, or indirectly, to these pollutant findings, sampling aimed to determine the extent of the pollution and to demonstrate its reduction shall be conducted, if not already done, as follow.

i. The extent of any impairment, or adverse water quality impact caused by pollutants found in biosurvey data, as qualified in V.A.3.a, above, shall be determined. Permittees shall report these findings in the overall MS4 water quality assessment required in section III.B.1 in the *first ANNUAL REPORT*.

ii. Subsequent to water quality control identification and inclusion in the SWMP as required in Parts III & IV of this permit, a corrective course of action to address adverse water quality impacts caused by MS4 pollutants found in biosurvey data shall be established, and the monitoring program shall be evaluated and updated, if necessary, by the *second ANNUAL REPORT*.

iii. After the course of action needed to correct the adverse water quality impact caused by MS4 pollutants found in biosurvey has been undertaken, progress of the permitted activities in correcting adverse water quality impacts caused by MS4 pollutants found in biosurvey data shall be reported as a part of *RENOTIFICATION*.

iv. For newly established, or continued, sediment and benthic community sampling collection strategies implemented to demonstrate water quality improvements in watersheds associated with a WQMS impairment, or sensitive waterbody, where BIO is the POC, or is indicated as a parameter, it is required that:

(a) Sediment monitoring stations could be established throughout water bodies for the primary purpose of isolating sources. Utilize existing sites to the MEP

(b) Unless existing monitoring data indicate improving trends (III.B, above) stations shall be sampled twice per permit cycle for percent silt/clay, fecal coliform, and eight metals (mercury, cadmium, copper, lead, zinc, arsenic, nickel, and aluminum).

(c) Study plans shall be submitted to the Department prior to the beginning of sampling.

(d) During the third year of the permit, evaluation of BMP performance based on monitoring results shall be done to prioritize the sampling for the last two years of the permit. Reports shall be submitted no later than the *RENOTIFICATION*.

(e) The location of additional stations shall be contingent on the results of the on-going illicit connection program and the prior results (V.A.3.a.iv(a)).

(f) Based on the findings on V.B.3.a.iv, herein, permittees shall revise the plan during the first half of the **fifth year** from the effective date of the permit and submit it as part of *RENOTIFICATION*.

v. In instances where Permittees own or operate facilities subject to parts II.B.3 & II.B.8 and those facilities are located in a TMDL watersheds or drain to a 303(d) impaired waters WQMS or sensitive waterbody, field surveys must be undertaken to insure that discharges are not contributing to violation of WQS. The field survey must be utilized to evaluate potential sources of POC. Should sources be identified, Permittees must address according to requirements in Part III.

vi. Permittees shall report sites, compounds and findings from section V.A.3.a.v, above. Summarized conclusions of these investigations shall be included along with the report for the TMDL watershed, 303(d) impaired WQMS, or the required sensitive water quality segment as scheduled in subparts III, IV, or V.A of this permit.

b. Biological sampling may be suitable at some locations to demonstrate the recovery of biological communities after implementation of stormwater control measures. Sampling locations in receiving waters must be both upstream and downstream of major MS4 discharges. When the permittee determines that biological monitoring is appropriate, at least half of the sites shall be monitored on annual basis with all locations reported at least twice by *RENOTIFICATION*. Regardless, the monitoring type, representativeness of the location, pollutant(s) of concern and / or parameters to be sampled, description of sampling equipment and sampling frequency of ambient waters should be strategically designed to demonstrate the level of progress made towards meeting the applicable WLA, addressing impairments in the receiving and/or in downstream waters, or to protect designated uses (Parts III & IV or subpart V.A)

4. ***Specific Sampling Requirements***.

a. Permittees shall monitor quarterly for all applicable parameters listed in V.A.1.e& 2.e(or at a different frequency in the case of 3.a.iv(b)) for each TMDL watershed, impaired WQMS or sensitive waterbody segment listed during the permit term. If not already started, sampling shall commence concurrently with the scheduled monitoring requirements of Part IV for that particular waterbody. Random deployment of continuously recording DO meters shall be employed to assess the diurnal dissolved oxygen in water bodies where this parameter is of concern. (Sections V.A.2.f, 3.a.v & c)

b. The need for additional parameters to be sampled shall be determined by the date required in part V for the particular TMDL watershed, impaired WQMS, or sensitive waterbody to have water quality controls identified and incorporated in the SWMP. All characterization points shall have been sampled and analyzed for these parameters one year after the date above.

5. ***General Considerations***

a. WQMS C-077 located at Cedar Creek in Congaree National Park – Weston Lake Loop Trail Bridge B, not attaining its recreational intended use due to the presence of *E.Coli* as a pollutant of concern, may require a permit to sample due to its location in Federal Land.

b. In the event Parts III, IV and V of this permit conflict with SC Water Pollution Control Permits Regulation 61-9 122.44(l), SC R. 61-9 122.44(l) will apply.

6 ***Analytical Data****:* Records of all analytical results shall be maintained during the length of the permit.

7 ***Sample Analysis****:* All sampling must be conducted in accordance with methods specified in 40 CFR Part 136 and analyzed by a lab certified to perform the analyses by the SC DHEC Bureau of Environmental Services (SCDHEC BES) unless otherwise specified.

8 ***Sampling Waiver***. In addition to the exclusion provisions in subpart III.B, when required samples can not be collected due to adverse climatic conditions, in lieu of a required sampling data, a detailed explanation of why samples could not be collected, including available documentation of the event shall be provided. Adverse climatic conditions prohibiting the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or factors making sample collection impracticable such as drought, etc.

9 ***Reporting*** Outfall, biological, ambient monitoring and / or habitat assessment conducted as required in parts III and IV of this permit must be evaluated for effectiveness in controlling the POC to be abated. Findings must be reported under part VI of this permit.

PART VI
REPORTING REQUIREMENTS

Permittees must report on the status of compliance with permit conditions including information on monitoring data collected and analyzed during the reported period. Comparison and analysis of trends from emerging practices are expected. Content, schedule and frequency of the reports are included.

A. Annual Report.

1. Permittees shall prepare a report to be submitted every year on the anniversary of the effective date of the permit.

   a. The *first ANNUAL REPORT* shall cover the period beginning on the effective date of the permit through two months before the anniversary date. See Appendix E for deadlines.

   b. The twelve (12) month period subsequent to that first ten months period shall be covered in the *second ANNUAL REPORT*. See Appendix E for deadlines.

   c. The twelve (12) month period subsequent to the twelve months period in VI.1.A.1.b shall be covered in the *third ANNUAL REPORT*. See Appendix E for deadlines.

   d. The *fourth ANNUAL REPORT* shall include the seventeen months subsequent to the period covered by the *third ANNUAL REPORT*. The *fourth ANNUAL REPORT* is due six (6) months before the permit expiration date and it is part of the *RENOTIFICATION* process. In the event the expired permit is continued, annual reports will be due on the anniversary date of the expired permit. See Appendix E for deadlines.

2. The system-wide *ANNUAL REPORT* shall be prepared by a member or designated representative for each permittee covered by this permit. Permittees shall be individually responsible for providing information on the portions of the MS4 for which they are responsible and for providing information for the system-wide report in a timely manner. Joint responsibility for the report submission, if applicable, shall be limited to the following:

   a. Participation in preparation of the overview for the entire system; and,
   b. Inclusion of the identity of any permittee who failed to provide input to the report.
   c. Each permittee shall sign and certify the report in accordance with Part VI.H. & VI.I. of this permit, and shall include a statement or resolution that the permittee's governing body or agency (or delegated representative) has reviewed or has been appraised of the content of the report.

3. Annual reports shall include the following:

   a. *Contacts List*
   List of contacts and responsible parties (e.g.: agency, name, phone number) who had input to and are responsible for the preparation of the report.

b. *SWMP Evaluation*
Overall evaluation of the SWMP including: Objective of Program; Major Findings (e.g.: water quality improvements or degradation); Major Accomplishments; Overall Program Strengths / Weaknesses; and Future Direction of Program.

c. *Summary Table*
A table of appropriate SWMP annual activities for each permittee shall be provided. The purpose of the table is to document in a concise form the program activities and permittees' compliance status with quantifiable permit requirements. The table shall indicate each Permittee's SWMP activities and accomplishments. Items to be reported include:

i. Activity description
ii. Number of activities (with frequency) that were scheduled for implementation and/or accomplishment in program element discussion (i.e., once/6 months, 100%/5 years, 6 sites monitored once/year, all sites inspected/permit term). Enter "Not Applicable" (N/A) if no specific schedule was specified
iii. Status of schedule for year ("yes" for schedule was adhered to, or "no" for schedule was not adhered to)
iv. Number of activities which were accomplished
v. The availability of documentation (i.e., inspection reports) for those activities which were accomplished and comments describing the reason(s) for any non-compliance.

Program elements that are administrative (e.g.: planning procedures, program development and pilot studies) are inappropriate for the summary table and shall be discussed in the narrative section of the *ANNUAL REPORT*.

vi. Examples of SWMP activities to be included in the Summary Table:

(a) Structural Controls - Maintenance and/or inspection activities of existing structural controls.
(b) Areas of New Development and Redevelopment – Water quality improvements achieved due to the verification tracking and enforcement of stormwater policies, standards and development planning procedures including inspections and maintenance.
(c) Roadway Maintenance - Street sweeping, litter control activities, and maintenance on storm water structures & roadside ditches.
(d) Flood Management – Assessment of water quality benefits of flood control projects. Description of storm water treatment projects that have been completed, including a description of drainage basin WQ improvement.
(e) Municipal Waste TSD Facilities - Inspections, monitoring, and implementation of control measures.
(f) Pesticide, Herbicide, and Fertilizer Application - Certification training and public education.
(g) Illicits - Inspections / Investigations / Enforcement
(1) System Map

(2) Field screening
(3) Spill Response
(4) Public reporting of Illicit Discharges
(5) Oil & / Household Hazardous Waste
(6) Sanitary sewer and septage seepage
(7) Effective Prohibition

(h) High Risk Industrial Facilities - inspection activities and monitoring
(i) Construction Planning, Procedures and Inspections - training of inspectors, certification of construction site operators, inspections, and enforcement actions
(j) Public Education Program - Summary of public participation and education activity, annual assessment

d. *Narrative Report*
The *ANNUAL REPORT* shall contain a narrative to discuss the SWMP elements in part II of the permit. In addition to the elements quantified in the summary table, section VI.A.3.c.vi, above, Monitoring Activities, Ground Water Protection and any additional SWMP elements shall be discussed in detail. The narrative discussion shall include:

i. Objective of SWMP Element,
ii. SWMP Element activities completed and those in progress,
iii. General discussion of Element, explanation of all SWMP elements activity deficiencies (e.g.: activities described in the program that have not been fully implemented or completed). Results of activities shall be summarized and discussed (e.g.: maintenance caused by inspection, pollutants detected by monitoring, investigations as a result of dry and wet weather screening, number and nature of enforcement items, education activities participation),
iv. Status of SWMP Element with respect to Parts II and III of the permit,
   (a) SWMP Element strengths and weaknesses,
   (b) Assessment of controls, and
   (c) Discussion of Element revisions that are summarized elsewhere in the report.

e. *Monitoring Section*
A Monitoring Section discussing the progress and results of the monitoring programs required under Parts II, III and V of the permit shall be included in the *ANNUAL REPORT*. The Monitoring Section of the *ANNUAL REPORT* shall include a summary of the monitoring program developed and implemented under Parts IV & V of this permit. Details to be discussed include:

i. Summary statement of the objective of each monitoring project included under the program
ii. Chart of the data from the monitoring completed
iii. Discussion of any results or conclusions derived from the monitoring completed
iv. Discussion of monitoring program revisions that are summarized elsewhere in the report.
v. In-depth analyses of water quality trends are expected.

f. *Summary of SWMP and Monitoring Modifications*
Provide a summary of SWMP and monitoring modifications made during the permit year

g. Fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the activities of the programs under the SWMP including a description of the source of funds that are proposed to meet the necessary expenditures, and the legal restrictions on the use of such funds. [SC R. 61-9 122.26 (d)(2)(vi)]

A complete fiscal analysis for each permittee's program implementation, both for the past calendar year and the next shall be provided. The analysis shall indicate budgets and funding sources.

h. Any information required to be submitted by the reported date
See Appendix F, section IX.F, below, for Specific Annual Report Requirements

i. Appendices

The following information shall be included as Appendices with each *ANNUAL REPORT*:

i. Analytical data collected from the monitoring program.
ii. Results of illicit connections screening or dry weather screening.
iii. Any other data specifically requested by SCDHEC to substantiate statements and conclusions reached in any reports.
iv. Analytical data in connection with in-stream monitoring performed for water quality purposes must be submitted in a format acceptable to the Department. In-depth analyses of water quality trends are expected for POC and monitored parameters.
v. Thorough and comprehensive evaluation and assessment of the effectiveness of BMP, controls and / or methods for the abatement of the POC implemented under subparts IV.B to address TMDL, C to address impaired WQMS, and D to address sensitive waters, including SWPA. In-depth analyses of water quality trends for POC and monitored parameters are expected
vi. Thorough and comprehensive evaluation and assessment of the effectiveness of all POC abatement efforts supported by outfall, biological, ambient monitoring and / or habitat assessment conducted as required in parts III and IV of this permit. In-depth analyses of water quality trends for POC and monitored parameters are expected.

B. Certification and Signature of Reports.

All reports required by the permit and other information requested by the Director shall be signed and certified in accordance with sub parts VI.H & VI.I of the permit.

C. Reporting: Where and When to Submit.

1. Monitoring results obtained during the reporting period running from the twelve-month (12) term beginning on the effective date of this permit and annually thereafter as required by Part VI shall be submitted as part of the *ANNUAL REPORT* during the permit term. See VI.A.3.i.i.

2. The original and three signed copies of the *ANNUAL REPORT* required by SectionVI.A.1 and all other reports required herein, shall be submitted to:

SC Department of Health and Environmental Control (SCDHEC)
ATTN: Bureau of Water / Compliance Assurance Division
2600 Bull Street.
Columbia, South Carolina 29201

D. Retention of Records.

Permittees shall retain the latest version of the Storm Water Management Program developed in accordance with Parts II and III of this permit during the term of the permit and for at least three years after the expiration date of this permit. Permittees shall retain all records of all monitoring information, of all reports required by this permit, and of all other data required by or used to demonstrate compliance with this permit, during the term of the permit and until at least three years after the expiration date of this permit. This period may be explicitly modified by alternative provisions of this permit or extended by request of the Director at any time.

PART VII
STANDARD PERMIT CONDITIONS

A. **Duty to Comply.** The permittees must comply with all conditions of this permit insofar as those conditions are applicable to each permittee, either individually or jointly. Any permit noncompliance by a permittee constitutes a violation of the Clean Water Act and the SC Pollution Control Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application for the non-complying permittee.

B. **Penalties for Violations of Permit Conditions.**

1. Criminal

   a. Negligent Violations, Knowing Violations, and Knowing Endangerment The SC Pollution Control Act provides that any person who negligently violates permit conditions under Section 48-1-320 of the Act is subject to a fine of not less than $500 nor more than $25,000 per day of violation, or by imprisonment for not more than 2 years, or both.

   b. False Statement The SC Pollution Control Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for not more than 2 years, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than $25,000 per day of violation, or by imprisonment of not more than 2 years, or by both. (See Section 48-1-340 of the SC Pollution Control Act).

2. Civil Penalties - The SC Pollution Control Act provides that any person who violates a permit condition under Section 48-1-330 of the Act is subject to a civil penalty not to exceed $10,000 per day for each violation.

C. **Duty to Reapply.** If a permittee(s) wishes to continue an activity regulated by this permit after the permit expiration date, the permittee(s) must apply for and obtain a new permit. The application shall be submitted at least 180 days prior to expiration of this permit. The Director may grant permission to submit an application less than 180 days in

advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated at SC Reg 61-9 122.6 and any subsequent amendments.

D. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

E. **Duty to Mitigate.** Each permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit having a reasonable likelihood of adversely affecting human health or the environment.

F. **Duty to Provide Information.** Each permittee shall furnish to the Director, within a time specified by the Director, any information the Director may request to determine compliance with this permit. The permittees shall also furnish to the Director upon request copies of records required by this permit.

G. **Other Information.** When a permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in any report to the Director, he or she shall promptly submit such facts or information.

H. **Signatory Requirements.** All DMRs, SWMPs, reports, certifications or information either submitted to the Director or required of the permittees, shall be signed by:

1. Either a principal executive officer or ranking elected official; or
2. A duly authorized representative of that person. A person is a duly authorized representative only if:

    a. The authorization is made in writing by a person described above and submitted to the Director, and
    b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

    If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new written authorization satisfying the requirements of this paragraph must be submitted to

the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

I. **Certification.** Any person signing documents under this section shall make the following certification:

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

J. **Penalties for Falsification of Reports.** Section 48-1-320 of the SC Pollution Control Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $25,000, or by imprisonment for not more than 2 years, or by both.

K. **Penalties for Falsification of Monitoring Systems.** The SC Pollution Control Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by fines and imprisonment described in Section 48-1-320 of the Act.

L. **Oil and Hazardous Substance Liability.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittees from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the Clean Water Act, section 106 of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), the SC Pollution Control Act, the SC Hazardous Waste Management Act, or the South Carolina Oil & Gas Act.

M. **Property Rights.** The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

N. **Severability.** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

O. **Requiring an Individual Permit.**

1. The Director may require any permittee authorized by this permit to obtain an individual NPDES permit. Any interested person may petition the Director to take action under this paragraph. The Director may require any owner or operator authorized to discharge under this permit to apply for an individual NPDES permit only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form (as necessary), a statement setting a deadline for the owner or operator to file the application, and a statement that on the effective date of the individual NPDES permit, coverage under this permit shall automatically terminate. Individual permit applications shall be submitted to the address of the Department at the address shown in Part VI.C.2 of this permit. The Director may grant additional time to submit the application upon request of the applicant. If an owner or operator fails to submit in a timely manner an individual NPDES permit application as required by the Director, then the applicability of this permit to the individual NPDES permittee is automatically terminated at the end of the day specified for application submittal.

2. Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application as specified by SC Regulation 61-9 122.26(d) with reasons supporting the request to the Director. Individual permit applications shall be submitted to the address shown in Part VI.C.2 of this permit. The request may be granted by the issuance of an individual permit if the reasons cited by the owner or operator are adequate to support the request.

P. **Federal/Environmental Laws.**

1. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable Federal law or regulation under authority preserved by Section 510 of the Clean Water Act.

2. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

Q. **Proper Operation and Maintenance**. Each permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water management programs. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

R. **Monitoring and Records.**

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. The permittees shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of the reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.
3. Records of monitoring information shall include:
    a. The date, exact place, and time of sampling or measurements;
    b. The initials or name(s) of the individual(s) who performed the sampling or measurements;
    c. The date(s) analyses were performed;
    d. The time(s) analyses were initiated;
    e. The initials or name(s) of the individual(s) who performed the analyses;
    f. References and written procedures, when available, for the analytical techniques or methods used; and
    g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

S. **Monitoring Methods**. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

T. **Inspection and Entry.** The permittee shall allow the Director or an authorized representative of SCDHEC, upon the presentation of credentials and other documents that may be required by law, to:

1. Enter the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

U. **Permit Actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

V. **Additional Monitoring by the Permittee(s).** If the permittees monitor more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased monitoring frequency shall also be indicated on the DMR.

PART VIII
PERMIT MODIFICATION

A. **Modification of the Permit:** The permittee may request SCDHEC to reopen the permit to incorporate relevant elements of the *Comprehensive Management Plan,* Town and Country, as defined in SC R. 61-9 122.26(d)(2)(iv)(A)(2), but not limited to, living resource targets and associated pollutant loading targets. If a permit modification is not requested during the term of this permit, elements of the plan will be considered for incorporation in the permit renewal. At any time, during the permit term, the permit will not be modified to include the relevant plan elements unless SCDHEC has previously agreed to incorporate consistent conditions in any permits or related rules and regulations that might affect the permittee. In addition, the permit may be reopened and modified during the life of the permit to:

1. Address impacts on receiving water quality caused, or contributed to, by discharges from the MS4;

2. Address changes in State or Federal statutory or regulatory requirements;

3. Include the addition of a new permittee who is the owner or operator of a portion of the MS4 located within the geographical boundaries of the existing permit;

4. Include additional Separate Storm Sewer(s) located adjacent to the geographical boundaries of the existing permittees but under the jurisdiction of another MS4 to be consistent with the State watershed permitting approach;

5. Allow for the inclusion of Separate Storm Sewer(s) designated by the permitting authority; or,

6. Include other modifications deemed necessary by the Director to comply with the goals and requirements of the Clean Water Act.

All modification to the permit will be made in accordance with SC Regulation 61-9 122.62, 122.63, and 124.5.

B. **Termination of Coverage for a Single Permittee**

Permit coverage may be terminated, in accordance with the provisions of SC Regulation 61-9 122.64 and 124.5, for a single permittee without terminating coverage for other permittees.

C. Modification of Storm Water Management Program(s)

Only those portions of the SWMP specifically required as permit conditions shall be subject to the modification requirements of SC regulation 61-9 124.5. Replacement of an ineffective or infeasible BMP implementing a required component of the Storm Water Management Program with an alternate BMP expected to achieve the goals of the ineffective or infeasible BMP shall be considered minor modifications to the SWMP and not modifications to the permit. (See also Part II.G.)

D. Changes in Monitored Outfalls

This permit is issued on a system-wide basis in accordance with Clean Water Act §402(p)(3)(i) and authorizes discharges from all portions of the MS4. Since all outfalls are authorized, changes in monitoring outfalls, other than those with specific numeric effluent limitations, if any, shall be considered minor modifications to the monitoring program and not modifications to the permit. (See also sub parts IV.B & 6.) Changes in monitoring outfalls with specific numeric effluent limitations shall be considered modifications to the permit and will be made in accordance with the procedures at SC Regulation 61-9 122.62.

PART IX
DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act shall apply to this permit and are incorporated herein by reference. Unless otherwise specified in this permit, additional definitions of words or phrases used in this permit are as follows:

A. "Ambient Monitoring Program" refers to a comprehensive program that is designed to accomplish the following goals:

1. Identify and document the existing condition of the surface waters of the State,
2. Document potential problem areas,
3. Establish stream ecoregion reference sites for comparison purposes,
4. Collect biological data at ecoregion reference sites to establish preliminary biological integrity measurements techniques, and
5. Establish a Statewide ambient monitoring network that will eliminate duplication, share data, increase efficiency, and improve assessment and management capabilities.

To date, monitoring strategies in Ambient Monitoring Program have been based on:

- Ecoregion Subregionalization and the associated stream Community Bioassessment Protocols (CBA) developed for the nonpoint source program,
- Chemistry Trend Network to fulfill the need to evaluate water quality over time,
- Chemistry Status Network with emphasis on water bodies with fair or poor water quality or areas which have not been recently sampled, and,
- Lake Ecoregion and Community Bioassessment Projects.

B. “Antidegradation for Activities Contributing Nonpoint Source Pollution to Impaired Waters - Maintaining Water Quality Through Storm Water Controls” is a document directing SCDHEC to ensure that Antidegradation Rules are implemented for activities that may contribute nonpoint source pollution to adjacent water bodies. It specifically ensures that no new activities will further degrade water bodies that are not presently meeting water quality standards. The Department’s regulatory involvement may occur through any program but will primarily occur through Storm Water Permitting, Section 401, Water Quality Certification, Critical Area Permitting, Coastal Zone Consistency Certification, and State Navigable Waters Permitting.

C. "Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements,

operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

D. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility, which is not a designed or established operating mode for the facility.

E. "CWA" means Clean Water Act, also referred to as "the Act" (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq., as amended by the WQA of 1987, P.L. 100-4, the "Act."

F. "Director" means the SC Department of Health and Environmental Control, or an authorized representative.

G. "Discharge" for the purpose of this permit, unless indicated otherwise, refers to discharges from the Municipal Separate Storm Sewer System (MS4).

H. "Flow-weighted composite sample" means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge at the time of sampling.

I. "Illicit connection" means any man-made conveyance connecting a non-storm water discharge directly to a municipal separate storm sewer system.

J. "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and other discharges listed in Part II. A.7.a. of this permit.

K. "Industrial Land Use" means land utilized in connection with manufacturing, processing, or raw materials storage at facilities identified under SC Regulation 61-9 122.26(b)(14).

L. "Landfill" means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.

M. "Large Municipal Separate Storm Sewer System" means all municipal separate storm sewers that are either:

(i) located in an incorporated place (city) with a population of 250,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or

(ii) located in the counties with unincorporated urbanized populations of 250,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or

(iii) owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large municipal separate storm sewer system.

N. "Medium Municipal Separate Storm Sewer System" means all municipal separate storm sewers that are either:

(i) located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or

(ii) located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or

(iii) owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the medium municipal separate storm sewer system.

O. "MEP" is an acronym for "Maximum Extent Practicable," the technology-based discharge standard for Municipal Separate Storm Sewer Systems established by Clean Water Act §402(p).

P. "MS4" is an acronym for "municipal separate storm sewer system" and is used to refer to either a Large or Medium Municipal Separate Storm Sewer System (e.g. "the Grenville MS4").

Q. "Municipal Separate Storm Sewer" means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, and storm drains):

(i) owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State Law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian Tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges to waters of the United States;
(ii) designed or used for collecting or conveying storm water;
(iii) which is not a combined sewer; and
(iv) which is not part of a Publicly Owned Treatment Works (POTW) as defined at SC Regulation 61-9 122.2.

R. "Permittee" means each individual applicant for an NPDES permit who is only responsible for permit conditions relating to the discharge that they own or operate. (Also, See SC Regulation 61-9 122.2)

S. "Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

T. “Pollutant(s) of concern” include biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from your MS4.

U. "Severe property damage" means substantial physical damage to property, damage to the treatment facility causing it to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

V. "State Water Quality Standards", is defined in Water Classification and Standards, SC Regulation 61-68, and Classified Waters, SC Regulation 61-69 and Sections 48-1-10, et seq., of the South Carolina Code.

W. "Storm Sewer", unless otherwise indicated, refers to a municipal separate storm sewer.

X. "Storm Water" means storm water runoff, snow melt runoff, surface runoff and drainage.

Y. "Storm Water Discharge Associated with Industrial Activity" is defined at SC Regulation 61-9 122.26(b)(14).

Z. "Storm Water Management Program" refers to a comprehensive program to manage the quality of storm water discharged from the municipal separate storm sewer system. For the purposes of this permit, the Storm Water Management Program is considered a single document, but may actually consist of separate programs (e.g. "chapters") for each permittee.

AA. "SWMP" is an acronym for "Storm Water Management Program."

AB. "Time-weighted composite" means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

AC. “Total Maximum Daily Load” (TMDL) is a process to establish the allowable load of pollutants or other quantifiable parameters for water bodies that do not meet designated uses under technology based pollution controls. The TMDL process is based on the relationship between pollution sources and in stream water quality conditions. In restoring and maintaining the quality of SC water resources, DHEC is developing TMDLs for water bodies whose designated uses are impaired as defined by 40 CFR 130 and Section 303(d) of the Clean Water Act. TMDLs can be established in response to point or nonpoint sources of pollution and are pollutant specific, and water body specific. Factors considered in establishing a TMDL for an affected water body include its classification, the water quality standard (WQS) that has been violated, the criteria used to determine the violation, and the degree of impairment. Technically, the process of establishing a TMDL involves target identification, source assessment, a linkage between target and sources, load calculation, TMDL development, and an implementation strategy. A target value is identified based on applicable water quality standards. The sources of the pollutants of concern, including both point and nonpoint sources, are assessed. Dischargers, potential nonpoint sources, land use patterns, stream flow, and climatological data may be used in the TMDL analysis. By quantifying the various pollutant contributions in the watershed and analyzing the fate and transport of the pollutant through the watershed, the existing pollutant load is calculated. The assimilative capacity of the water body for the pollutant of concern is determined based on SC WQS. The TMDL is based on the assimilative capacity including a MOS (margin of safety). The TMDL is then allocated between point and nonpoint sources. The TMDL is implemented through all mechanisms available to DHEC and State and local

entities to effectively address the source of impairment. DHEC EQC local district offices, BOW enforcement, SRF loans, NPDES permits (individual and general including MS4s), and public education efforts will be intertwined in a strategy geared toward abating the sources of impairment, and attaining the intended use of the water body.

AD. "Waters of the State" is defined at SC Regulation 122.2.

AE. "Watershed Water Quality Management Strategy" The interdependence of water quality and all the activities that occur in the associated drainage basin is affirmed through this approach. For the purposes of this program, South Carolina is divided into 5 major drainage basin groupings. NPDES permitting, among other activities, is performed for each basin during each five-year cycle. The current NPDES permitting cycle for each basin is presented next:

	FFY16	FFY17	FFY18	FFY19	FFY20
Savannah Salkehatchie (01)			NPDES Permitting		
Saluda Edisto (02)				NPDES Permitting	
Catawba Santee (03)					NPDES Permitting
Pee Dee (04)	NPDES Permitting				
Broad (05)		NPDES Permitting			

SCDHEC's watershed managers focus on identifying sources of water quality problems in each basin. The watershed managers work closely with local governments, lake and river associations, industry representatives, and state and federal agencies to implement water quality improvement and prevention strategies.

APPENDIX A

Site Performance Standard Examples

Basis for Performance Standard	***Description***	***Performance Standard***
Rainfall	*Minimum storm volume to be retained on site.*	*Design, construct, and maintain stormwater management practices that manage rainfall on-site, and prevent the off-site discharge of the precipitation from [insert standards, such as "the first one inch of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation"]. Discharge volume reduction can be achieved by canopy interception, soil amendments, evaporation, rainfall harvesting, engineered infiltration, extended filtration and/or evapotranspiration and any combination of the aforementioned practices. This first one inch of rainfall must be 100% managed with no discharge to surface waters, except when the permittee chooses to implement the Incentives for Redeveloped Sites in Part II.B.2.j.i, above.*
Rainfall	*Minimum storm size to be retained on site*	*Design, construct, and maintain stormwater management practices that manage rainfall on-site, and prevent the off-site discharge of the precipitation from all rainfall events less than or equal to [insert standards, such as "the 95th percentile rainfall event"]. This objective must be accomplished by the use of infiltration, evapotranspiration and/or harvest and reuse of rainwater. The 95th percentile rainfall event is the event whose precipitation total is greater than or equal to 95 percent of all storm events over a given period of record.*
Recharge/Runoff	*Hydrologic Analysis*	*Design, construct, and maintain stormwater management practices that preserve the pre-development runoff conditions following construction. The post-construction rate, runoff volume, peak flow, duration and temperature of discharges must not exceed the pre-development rates and the pre-development hydrograph for 1, 2, 10, 25, 50 and 100 year storms must be replicated through site design and other appropriate practices. These goals must be accomplished through the use of infiltration, evapotranspiration, and/or rainwater harvesting and reuse practices.*

Basis for Performance Standard	***Description***	***Performance Standard***
		Defensible and consistent hydrological assessments and modeling methods must be used and documented.
Recharge	*Groundwater Recharge Requirements*	*Any "major development" project, which is one that disturbs [insert standards, such as at least one (1) acre of land or creates at least 0.25 acres of new or additional impervious surface], must comply with one of the following two groundwater recharge requirements:* • *Demonstrate through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain 100 percent of the average annual pre-construction groundwater recharge volume for the site; or* • *Demonstrate through hydrologic and hydraulic analysis that the increase of stormwater discharges volume from pre-construction to post-construction for the two-year storm is infiltrated.*
Annual Pollutant Load	*Loading Calculations*	*Design, construct and maintain stormwater management practices that preserve the pre-development runoff conditions following development. Post construction annual pollutant loads are not allowed to exceed pre-development levels. Whenever and wherever appropriate, runoff volume and peak discharge rates for specific design storms should be taken into account as well. These goals will be accomplished through low impact development practices (LID) including impervious cover limitations and treatment means. Water quality modeling methods used to support establishment of this standard must be defensible and be consistent with the MEP standard, to protect water quality and to satisfy the appropriate water quality requirements of the CWA.*

APPENDIX B

Fact Sheet
Freshwater Recreational Use Water Quality Standard Change from Fecal Coliform to *Escherichia coli* and its Effect on Established and Future Pathogen TMDL

Fact Sheet
Freshwater Recreational Use Water Quality Standard Change from Fecal Coliform to *Escherichia coli* and its Effect on Established and Future Pathogen TMDL

South Carolina Department of Health and Environmental Control (SC DHEC, or the Department) has reevaluated the freshwater water quality standard (WQS) for recreational uses. Recreational uses are activities such as swimming, water skiing, wading, boating, and fishing. The goal of reevaluating this standard was to provide better protection for recreational uses of our State's freshwaters.

Prior to February 28, 2013, DHEC used fecal coliform (FC) bacteria as the pathogen indicator of freshwater recreational water quality. In order to support the adoption of a new WQS, SC DHEC conducted a pathogen indicator study (PIS) in 2009. The study concluded that *Escherichia coli (E. coli)* bacteria is the more appropriate indicator for the presence of pathogens in freshwaters for recreational uses. In addition, analysis of data collected during the study demonstrated a correlation between FC bacteria and *E. coli* in freshwaters.

During 2012 and following the public participation, public comment period and legislative processes, DHEC submitted a proposed amendment to US Environmental Protection Agency to change the freshwater pathogen indicator from FC bacteria to *E. coli* in R. 61-68. Details of this process as well as (PIS) raw data can be found at: http://www.scdhec.gov/environment/water/fwater.htm.

The amendment was approved by USEPA on February 28, 2013. *E. coli* is currently the applicable recreational use water quality indicator in freshwaters. Details regarding the *E. coli* WQS for freshwaters may be found at the following link:
http://www.scdhec.gov/environment/water/regs/R.61-68.pdf

As noted in R. 61-68 E.14.c.(14), established recreational use FC bacteria TMDLs will be affected by this change. Those FC bacteria TMDL targets were based on the previous single sample maximum (SSM) WQS of 400 cfu/100 ml. The new TMDL targets for *E. coli* TMDLs will be calculated utilizing the recently adopted *E. coli* SSM WQS of 349 MPN/100 ml.

Based on the observed relationship between FC and *E. coli* bacteria in freshwaters determined during the 2009 PIS, the Department determined that it is appropriate to translate established recreational use FC bacteria TMDL targets to equivalent *E. coli* bacteria TMDL targets. The established FC TMDL can be converted to *E. coli* TMDL by multiplying the FC TMDL number by 0.8725. The 0.8725 ratio was derived by dividing the current 349 MPN/100ml SSM WQS for *E. coli* by 400 cfu/100 ml, the former SSM WQS for FC bacteria. Furthermore, required percentage reductions will remain the same, based on the conditions observed at the time of initial FC bacteria TMDL development.

The relationship observed during the 2009 PIS was based on analysis of numerous data collected statewide. **Note that it is not appropriate to translate observed FC bacteria data to corresponding *E. coli* values using the 0.8725 translator. Only established FC TMDL targets should be converted to *E. coli* targets using the ratio.**

Future recreational use pathogen TMDLs will be developed using the best available data. In some cases, TMDLs may be developed using FC data and translated to equivalent values for *E. coli*. In other cases, as sufficient data become available, TMDLs will be developed using *E. coli* data. In either case, the TMDLs are meant to address the broader recreational use impairment by targeting the appropriate **pathogen** indicator.

APPENDIX C

EPA Approved Total Maximum Daily Loads in Richland County

Water Quality Monitoring Station and Pollutant of Concern for EPA Approved Total Maximum Daily Loads in Richland County

TMDL	Station
Twenty-Five Mile Creek Fecal TMDL	CW-229
Spears and Kelly Creeks TMDL	CW-155
Cedar Creek Fecal TMDL	B-320
Lower Broad Fecal TMDL	B-350
	RS-06003
	B-110
	B-316
	B-834
	B-280
	B-337
Gills Creek Fecal & DO TMDL	C-048 (BOD5 & Ammonia)
	C-001 (FC)
	C-017 (BOD5, Ammonia & FC)

APPENDIX D

Impaired Water Quality Monitoring Stations in Richland County

Basin, Water Quality Monitoring Stations, Impaired Uses and Pollutant of Concern in Richland County
Based on Draft 2014 303(d) List

BASIN	STATION	DESCRIPTION	USE	CAUSE
CATAWBA	CW-250	COLONELS CK AT SC 262	AL	CU
BROAD	B-801	WATEREE CRK. AT SR 698	AL	BIO
BROAD	B-081	CRANE CREEK AT US 321	AL	BIO
BROAD	B-316	CRANE CK AT S-40-43 UNDER I-20 - N COLA	AL	DO (BOD_5 /NH_3N)
BROAD	B-280	SMITH BR AT N MAIN ST (US 21) IN COLA	AL	BIO
SALUDA	RS-09323	LIGHTWOOD KNOT BRANCH AT TRENHOLM RD EXTENSION	AL	BIO
SALUDA	B-080	BROAD RIVER DIVERSION CANAL AT COLA WATER PLANT	REC	ECOLI
SALUDA	C-021	MILL CK AT SC 262	REC	ECOLI
SALUDA	C-073	REEDER POINT BR AT SC 48	REC	ECOLI
SALUDA	C-071	CEDAR CK AT S-40-734	AL	BIO
SALUDA	C-074	CONGAREE RVR, WEST BOUNDARY OF CONGAREE SWAMP MONUMENT	REC	ECOLI
SALUDA	C-076	CEDAR CK CANOE ACCESS OFF S-40-1288 (SO CEDAR CK RD)	REC	ECOLI
SALUDA	C-077	CEDAR CREEK IN CONGAREE NATIONAL PARK - WESTON LAKE LOOP TRAIL AT BRIDGE B	REC	ECOLI
SALUDA	C-072	TOMS CK AT SC 48	REC	ECOLI
SALUDA	C-579	TOMS CREEK AT POWER LINE AND RR TRACK	AL	BIO
SALUDA	S-950	TOM'S CREEK AT RED BLUFF RD.	AL	PH
SALUDA	S-950	TOM'S CREEK AT RED BLUFF RD.	REC	ECOLI

APPENDIX E

Classified Waters in Richland County

Name, Classification, Description and Applicable Standards of Waterbodies in Richland County

Waterbody Name	Classification	Waterbody Description and (Site Specific Standard)
Big Lake	ORW (FW)	Entire lake within the boundaries of Congaree National Park
Broad River (Main Stem)	FW	Entire river tributary to Congaree River
Catawba - Wateree River	FW	Entire river tributary to Santee River
Cedar Creek	FW	Entire creek tributary to Broad River
Cedar Creek	FW	Portion of the creek outside the boundary of Congaree National Park
Cedar Creek	ORW (FW)	Portion of the creek beginning at the boundary of Congaree National Park to Wise Lake
Cedar Creek	ORW (FW)	Portion of the creek beginning at Wise Lake to confluence with Congaree River
Congaree River	FW	Entire river tributary to Santee River
Crane Creek	FW	Entire creek tributary to Broad River
Dry Branch	ORW (FW)	Portion of the stream beginning at the boundary of the Congaree National Park to Weston Lake
Dry Branch	FW	Portion of the branch outside the boundary of the Congaree National Park
Gills Creek	FW	Entire creek tributary to Congaree River
Jackson Creek	FW	Entire creek tributary to Gills Creek
Lake Murray (NDZ)	FW	Entire lake on Saluda River
McKenzie Creek	FW	Portion of the creek outside the boundary of the Congaree National Park
McKenzie Creek	ORW (FW)	Portion of the creek beginning at the boundary of the Congaree National Park to its confluence with Toms Creek
Mill Creek	FW	Entire creek tributary to Congaree River
Myers Creek	FW	Portion of the creek outside the boundary of the Congaree National Park
Myers Creek	ORW (FW)	Portion of the creek beginning at the boundary of the Congaree National Park to its confluence with Cedar Creek
Old Dead River	ORW (FW)	Entire river within the boundary of the Congaree National Park
Rawls Creek	FW	Entire creek tributary to Saluda River
Running Lake Creek	FW	Portion of the creek outside the boundary of the Congaree National Park
Running Lake Creek	ORW (FW)	Portion of the creek beginning at the boundary of the Congaree National Park to its confluence with Toms Creek

Waterbody Name	Classification	Waterbody Description and (Site Specific Standard)
Saluda River (Main stem)	FW	Entire river tributary to Lake Murray
Saluda River (Main stem)	TPGT (sp.)	Portion from the Lake Murray Dam to the confluence with Broad River (D.O. not less than daily average 5 mg/l, a running thirty day average of 5.5 mg/l, with a low of 4.0 mg/l)
Saluda River (Main stem) Unnamed Tributaries	FW	All tributaries to the main stem of Saluda River from the Lake Murray Dam to the confluence with Broad River
Smith Branch	FW	Entire branch tributary to Broad River
Spears Creek	FW	Entire creek (and its tributaries) from its headwaters to its confluence with Wateree River
Stoops Creek	FW	Entire creek tributary to Saluda River
Toms Creek	FW	Portion of the creek outside the boundary of the Congaree National Park
Toms Creek	ORW (FW)	Portion of the creek beginning at the boundary of the Congaree National Park to its confluence with Cedar Creek
Unnamed Creeks, Ponds, or Lakes	FW	Any portions tributary to waters unnamed or named located within the boundary of the Congaree National Park to the boundary of the Congaree National Park
Unnamed Creeks, Ponds, or Lakes	ORW (FW)	All portions of waters and waters located wholly within the boundary of the Congaree National Park
Wateree River	FW	See Catawba-Wateree
Weston Lake	ORW (FW)	Entire lake within the boundary of the Congaree National Park
Wildcat Creek	FW	Entire creek tributary to Gills Creek
Wise Lake	ORW (FW)	Entire lake within the boundary of the Congaree National Park

APPENDIX F

Specific Annual Reporting Requirements

Specific Annual Reporting Requirements

Section	Requirement	Deadline
II.A.1	SWMP Compliance	1st Annual Report due on Monday, 01/02/2017
II.B.1.b, c.i, iv(a), & (d) and d.vii	Structural Controls and Storm Water Collection System Operation	
II.B.2.c	Richland County Comprehensive Plan Water Quality Standards	
II.B.2.c.v	Post Construction BMP Requirements	
II.B.2.g	Water Quality Improvements in Sensitive Waters	
II.B.2.i.v	Post Construction Rationale	
II.B.2.j.iii - v	Verification, Inspection, Tracking & Enforcement	
II.B.3.e	Existing Roadways	
II.B.4.d	Flood Control WQ Assessment	
II.B.5.b & c	SWP3 for Municipal Facilities	
II.B.6.e	PHF Accomplishments	
II.B.7.b.i	Illicit Discharges and Improper Disposal	
II.B.7.b.v	Uncover Illicit Connections	
II.B.7.b.vi(4)	Up-to-date Inspection, Enforcement & Resolutions Database	
II.B.7.d.vi(g)	Illicit Discharges & Improper Disposal ERP follow up	
II.B.7.g.v(c) & vi	Effective Prohibition of Sewage & Septage Seepage	
II.B.7.j(f)	Training Activities Summary	
II.B.7.k	Illicit Discharge/Improper Disposal SOP SWMP	
II.B.8.b.ii(e) & iv	Report on 25% of Industrial Facilities Inspected	
II.B.8.e.iiiii	Industrial & High Risk Runoff Monitoring Findings	
II.9.c.vii(b), II.H VI.A.3.c.vi(i)	SCR100000, SC R.72-300 & SC R. 61-9, Site Plan Review	
II.B.9.e	Construction ERP	
II.B.10.a.i(k), ii(d) VI.A.3.c.vi(j)	PEO assessment	
II.B.10.a.ii.(d)	IDDE Public Awareness & Reporting	
II.B.10.a.ii(f)	Construction Site Runoff Education	
II.B.10.a.ii(g)	Animal Waste Public Education Program	
II.E, H.4	Roles and Responsibilities of Permittees	
II.G	Fiscal Resources	
II.H	SWMP Review and Modifications	
II.I	ERP	
III.A.3	Waiver Applicability, if any	
IV.B	Prioritize TMDL Watersheds	
IV.B.1.a.vi, IV.E.3.d.ii(a)	Existing TMDL outfalls inventoried, ID & map Monitoring Stations Established, as needed	
IV.C.1	303(d) WQMS Determination	
IV.C.2, IV.E.3.d.ii(a)	Water Quality Controls Identified First 303(d) Tier Monitoring Stations Established, as needed	
IV.D.5.c IV.E.3.d.ii(a)	Water Quality Controls Identified First Sensitive Tier Monitoring Stations Established, as needed	
II.A.1	SWMP Compliance	2nd Annual Report due on Tuesday 01/02/2018
II.B.1.b, c.ii, iv(a) & d.vii.	Structural Controls and Storm Water Collection System Operation	

Section	Requirement	Deadline
II.B.2.d.v	New Development to Pre-Development Conditions	
II.B.2.e II.B.2.i.v(a) & (c)	Water Quality Restored in Re-Development to Pre-Development Conditions	
II.B.2.c II.B.2.f	Storm Water Quality Addressed in land use development and re-development planning	
II.B.2.g& i.v	Water Quality Improvements in Sensitive Waters	
II.B.2.i.v	Post Construction Rationale	
II.B.2.j	Site Performance Standards, Plan Review, Maintenance, Inspections & Enforcement	
II.B.2.j.i	Site Performance Standards Established & Enforced	
II.B.2.j.ii	Post Construction BMP Inspections and Enforcement	
II.B.3.e	Existing Roadway	
II.B.5.b & c	SWP3 for Municipal Facilities	
II.B.6.e	PHF Accomplishments	
II.B.7.b.i	Illicit Discharges and Improper Disposal	
II.B.7.b.v	Illicit Connections Inspections	
II.B.7.b.vi(4)	Up-to-date Inspection, Enforcement & Resolutions Database	
II.B.7.c.iii	Field Screening Assessment	
II.B.7.d.vi(g)	Illicit Discharges & Improper Disposal ERP follow up	
II.B.7.g.v(c) & vi	Effective Prohibition of Sewage & Septage Seepage	
II.B.7.j(f)	Training Activities Summary	
II.B.8.b.ii(e)	Report on 25% of Industrial Facilities Inspected	
II.B.8.e.iii	Industrial & High Risk Runoff Monitoring Findings	
II.B.9.b.vi(b)	SCR100000, SC R.72-300 & SC R. 61-9,	
II.B.9.e	Construction ERP	
II.9.c.vi(b), II.H VI.A.3.c.vi(i)	Site Plan Review	
II.B.10.a.i(k)	PEO assessment	
II.B.10.a.ii(d)	IDDE Public Awareness & Reporting	
II.B.10.a.ii(f)	Construction Site Runoff Education	
II.B.10.a.ii(g)	Animal Waste Public Education Program	
II.B.10.a.vi	Animal Waste Reduction	
II.E, H.4	Roles and Responsibilities of Permittees	
II.G	Fiscal Resources	
II.H	SWMP Review and Modifications	
IV.B.1.a.vi IV.E.3.d.ii(a)	Existing TMDL outfalls inventoried, ID and mapped Monitoring Stations Established, as needed	
IV.B.2	Implementation Plan First Existing TMDL Tier	
IV.B.5.b.i(a)(8) IV.E.3.d.ii(a)	Monitoring & Assessment Plan if New TMDL Monitoring Stations Established, as needed	
II.B.3.g, IV.B.6.d IV.B.8.d.iv(b) IV.E.3.d.ii(b)(2)	BMP Implementation Road Runoff BIO, or DO (BOD_5 /NH_3N) , if applicable	
IV.C.3 IV.E.3.d.ii(a)	Water Quality Controls Identified Second 303(d) Tier Monitoring Stations Established, as needed	
IV.C.4	Water Quality Controls Implemented First 303(d) Tier	
IV.D.6.c & d IV.E.3.d.ii(a)	Water Quality Controls Identified 2nd Sensitive Tier Monitoring Stations Established, as needed	

Section	Requirement	Deadline
IV.E.1	Monitoring Plans, Results for TMDL watersheds	
IV.E.1. a.iii & b.ii	Implemented Monitoring Plans	
IV.E.2.a	TMDL Monitoring Plans	
IV.E.3.c	Sediment, Macro & DO (BOD_5 & NH_3N) , TMDL, 303, Sensitive	
IV.E.3.d.i(b) IV.E.3.d.ii(b)(2) IV.C.2 &D.5.c	Report Monitoring Results, if applicable First 303(d) Tier & First Sensitive Tier	
II.A.1	SWMP Compliance	3rd Annual Report due on Wednesday 01/02/2019
II.B.1.b, c.i, & d.vii	Structural Controls and Storm Water Collection System Operation	
II.B.2.d.v	New Development to Pre-Development Conditions	
II.B.2.g, & i.v	Water Quality Improvements in Sensitive Waters	
II.B.3.e	Existing Roadways	
II.B.5.b	SWP3 for Municipal Facilities	
II.B.6.e	PHF Accomplishments	
II.B.7.b.i	Illicit Discharges and Improper Disposal	
II.B.7.b.v	Illicit Connections Inspections	
II.B.7.b.vi(4)	Up-to-date Inspection, Enforcement & Resolutions Database	
II.B.7.d.vi(g)	Illicit Discharges & Improper Disposal ERP follow up	
II.B.7.g.v(c) & vi	Effective Prohibition of Sewage & Septage Seepage	
II.B.7.j(f)	Training Activities Summary	
II.B.8.b.ii(e)	Report on 25% of Industrial Facilities Inspected	
II.B.8.e.iii	Industrial & High Risk Runoff Monitoring Findings	
II.B.9.b.vi(b)	SCR100000, SC R.72-300 & SC R. 61-9,	
II.B.9.e	Construction ERP	
II.9.c.vi(b), II.H VI.A.3.c.vi(i)	Site Plan Review	
II.B.10.a.i(k)	PEO assessment	
II.B.10.a.ii(d)	IDDE Public Awareness & Reporting	
II.B.10.a.ii(f)	Construction Site Runoff Education	
II.B.10.a.ii(g)	Animal Waste Public Education Program	
II.B.10.a.vi	Animal Waste Reduction	
II.E, H.4	Roles and Responsibilities of Permittees	
II.G	Fiscal Resources	
II.H	SWMP Review and Modifications	
IV.B.1.a.vi IV.E.3.d.ii(a)	TMDL outfalls inventoried, ID and mapped Monitoring Stations Established, as needed	
IV.B.3	Implementation Plan Second Existing TMDL Tier	
IV.B.5.b.i(a)(8) IV.E.3.d.ii(a)	Monitoring & Assessment Plan, if New TMDL Monitoring Stations Established, as needed	
IV.B.5.b.i(b)(3)(4)	Update/Progress if New TMDL Assessment Plan	
II.B.3.g, IV.B.6.d IV.B.8.d.iv(b) IV.E.3.d.ii(b)(2)	BMP Implementation Road Runoff BIO, or DO (BOD_5 & NH_3N), if applicable	
IV.B.6.f	TMDL Implementation Progress	
IV.C.4 IV.E.3.d.ii(a)	Water Quality Controls Identified Last 303(d) Tier Monitoring Stations Established, as needed	
IV.C.5	Water Quality Controls Implemented 2nd 303(d) Tier	

Section	Requirement	Deadline
IV.D.6.c & d IV.E.3.d.ii(a)	Water Quality Controls Identified Last Sensitive Tier Monitoring Stations Established, as needed	
IV.E.1	Monitoring Plans, Results for TMDL watersheds	
IV.E.1.a.iii & b.ii	Implemented Monitoring Plans	
IV.E.2.a	TMDL Monitoring Plans	
IV.E.3.c	Sediment, Macro & DO (BOD_5 & NH_3N) , TMDL, 303, Sensitive	
IV.E.3.d.i(b) IV.C.2 &D.5.c	Monitoring Program Evaluated /Updated, if necessary First 303(d) Tier & First Sensitive Tier	
IV.E.3.d.i(b) IV.E.3.d.ii(b)(2) IV.C.3, D.6.c&d	Report Monitoring Results, if applicable Second 303(d) Tier & Second Sensitive Tier	
II.A.1	SWMP Compliance	4th Annual Report due on *RENOTIFICATION Monday 07/05/2020*
II.B.1.b & d.vii	Structural Controls and Storm Water Collection System Operation	
II.B.2.d.v	New Development to Pre-Development Conditions	
II.B.2.g& i.v	Water Quality Improvements in Sensitive Waters	
II.B.2.g & h	Performance Standards for Water Quality Controls	
II.B.2.i.v	Post Construction Rationale	
II.B.3.e.ii	Road Runoff Management Plan Existing Roadways Improvements	
II.B.5.b	SWP3 for Municipal Facilities	
II.B.6.e	PHF Accomplishments	
II.B.7.b.i	Illicit Discharges and Improper Disposal	
II.B.7.b.v	Illicit Connections Inspections	
II.B.7.b.vi(4)	Up-to-date Inspection, Enforcement & Resolutions Database	
II.B.7.b.vii	Illicit Discharge Element Success Assessed	
II.B.7.c II.B.7.c.iii(f)	Entire MS4 Dry Weather Field Screening Completed	
II.B.7.c.iii	Field Screening Assessment Update	
II.B.7.d.vi(g)	Illicit Discharges & Improper Disposal ERP follow up	
II.B.7.g.v(c) & vi	Effective Prohibition of Sewage & Septage Seepage	
II.B.7.j(f)	Training Activities Summary	
II.B.8.b.ii(e)	Report on 25% of Industrial Facilities Inspected	
II.B.8.e.iii	Industrial & High Risk Runoff Monitoring Findings	
II.B.8.d.vi	Industrial Runoff Monitoring Detailed Analyses	
II.B.9.b.vi(b)	SCR100000, SC R.72-300 & SC R. 61-9	
II.B.9.e	Construction ERP	
II.9.c.vi(b), II.H VI.A.3.c.vi(i)	Site Plan Review	
II.B.10.a.ix	PEO assessment	
II.B.10.a.ii(d)	IDDE Public Awareness & Reporting	
II.B.10.a.ii(f)	Construction Site Runoff Education	
II.B.10.a.ii(g)	Animal Waste Public Education Program	
II.B.10.a.vi	Animal Waste Reduction	
II.E, H.4	Roles and Responsibilities of Permittees	
II.G	Fiscal Resources	
II.H	SWMP Review and Modifications	
IV.B.4	Implementation Plan Last Existing TMDL Tier	
IV.B.5.b.i(a)(8)	Monitoring & Assessment Plan if New TMDL	

Section	Requirement	Deadline
IV.B.5.b.i(b)(3)(4)	Update/Progress if New TMDL Assessment Plan	
II.B.3.g,IV.B.6.d IV.B.8.d.iv(b) IV.E.3.d.ii(b)(2)	BMP Implementation Industrial Road Runoff BIO or DO (BOD_5 & NH_3N) , if applicable	
IV.B.6.f	TMDL Implementation Progress	
IV.C.5	Water Quality Controls Implemented Last 303(d) Tier	
IV.E.1	Monitoring Plans, if any, Results TMDL watersheds	
IV.E.1 a.iii & b.ii	Implemented Monitoring Plans	
IV.E.2.a IV.E.3.d.ii(a)	New TMDL Monitoring Plans, if any Monitoring Stations Established, as needed	
IV.E.3.c	Sediment, Macro & DO (BOD_5 & NH_3N) , TMDL, 303, Sensitive	
IV.E.3.d.i(b) IV.C.2 &D.5.c	Water Quality Corrected, if applicable First 303(d) Tier & First Sensitive Tier	
IV.E.3.d.i(b) IV.C.3, D.6.c&d	Monitoring Program Evaluated /Updated, if necessary Second 303(d) Tier & Second Sensitive Tier	
IV.E.3.d.i(b) IV.E.3.d.ii(b)(2) IV.C.3 &D.6.c&d	Report Monitoring Results, if applicable Third 303(d) Tier & Third Sensitive Tier	